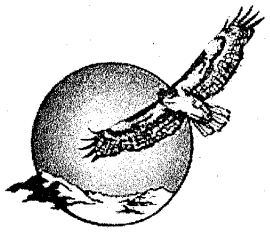
3 COMMENT DOCUMENTS

3.1 INTRODUCTION

This section presents the documents submitted to the DOE during the 30-day public comment period on the draft SA and the transcripts of the two public briefings held on February 11, 1999. DOE reviewed each document and transcript and identified the public comments provided. Each comment identified is marked in the margin with a bar and the document number and sequential comment number in that document. For example, Comment 3-11 was identified in Document 3 (3) as the eleventh (11) comment within that document. DOE has responded individually to each identified comment in Section 4 of this Comment Response Document.

3.2 Document 1: Tri-Valley CAREs

Tri-Valley CAREs
Citizens Against a Radioactive Environment
5720 East Avenue #116, Livermore, CA 94550 • (510) 443-7148 • Fax (510) 443-0177



Peace Justice Environment since 1983

February 10, 1999

U.S. Department of Energy
Oakland Operations Office
1301 Clay St.
Oakland, CA 94612

Re: DOE/EIS-0157-SA-01, January 1999 - Draft Supplement Analysis for Continued Operation of Lawrence Livermore National Laboratory and Sandia National Laboratories, Livermore, California

Dear Sirs and Madams:

This letter is Tri-Valley CAREs' (Communities Against a Radioactive Environment) response to the above-referenced Draft Supplement Analysis (DSA) on behalf of Tri-Valley CAREs' approximately 2200 family-members in the communities surrounding the Lawrence Livermore National Laboratory (LLNL) and the Sandia National Laboratories (SNL).

Tri-Valley CAREs, a 16-year-old grassroots environmental organization, is a community-based "watch dog" over LLNL's activities. Further, we hold two U.S. Environmental Protection Agency Technical Assistance Grants to monitor environmental cleanup at both LLNL's Main Site and its Site 300 weapons testing station.

Tri-Valley CAREs strongly disagrees with the DSA's conclusion that no supplementation of the 1992 EIS/EIR is needed. In fact, an entirely new EIS/EIR is needed. Our reasons are as follows:

1-1 **A. Since 1992, LLNL has 1) remained a "Superfund" Site; 2) had chronic pollution problems; 3) had frequent accidents involving radioactive and toxic contaminants; 4) had chronic problems with noncompliance with safety regulations; 5) received numerous Notices of Deficiency and Notices of Violations from the State Dept. of Toxic Substances Control (DTSC); 6) continued to have groundwater contamination problems; 7) continued to have sewer system problems; and 8) continued to have problems with noncompliance with safe storage requirements.**

On December 9, 1997, Tri-Valley CAREs sent a letter to the California Environmental Protection Agency Department of Toxic Substances Control, Region 2 (in Berkeley, California) as a public comment on LLNL's application for a Hazardous Waste Treatment & Storage Facility Permit (WTSF). This letter included a list of the following ongoing, chronic problems at LLNL:

1-2 1. **Both LLNL's Main Site and Site 300 are on the National Priorities List as extremely contaminated "Superfund" sites.** A federal regulation promulgated by past DOE Secretary Watkins requires environmental review of DOE facilities, including LLNL, every 5 years. LLNL's last full EIS/EIR was in 1992, nearly 7 years ago, and therefore out-of-date. More than a supplement analysis is needed in this instance. A new EIS/EIR is the appropriate and necessary level of environmental review.

1-3 2. **LLNL has chronic pollution problems**. As reported in May, 1997, **the City of Livermore cited LLNL** for chronic discharges of heavy metals and corrosive chemicals into the municipal sewer system. According to city officials, there had been **14 releases from LLNL**

1-3 cont.

above its permit limits since January, 1996, a rate of about one violation per month. One February, '97, accident involved a discharge of silver, **costing $41,000**, and another discharge in March, '97, this time of lead, **cost $8,000.**

3. **LLNL has a history of frequent accidents right up to the present**. Examples of on-site accidents reported **just for 1997** include: **February** – LLNL doctors cut a small hunk of plutonium-contaminated tissue from an employee's thumb after the worker had accidentally stuck himself with a sliver of the radioactive metal during routine cleanup. **March** – Three LLNL workers were contaminated when **uranium** filings caught fire. **April** – It was reported that earlier in '97, a **chlorine** gas leak forced about 20 workers to flee after an alarm sounded. **May** – The City of Livermore cited LLNL, again, for chronic discharges of **Heavy metals and corrosive chemicals**. Since January, 1996, LLNL has violated its permit discharge limits about once a month. **June** – It was reported that in May, '97, two workers were contaminated with **tritium** (radioactive hydrogen) while packaging the radioactive waste in the Tritium Facility. **July** – On July 2, workers shredding used air filters were **radioactively contaminated**. One worker was contaminated with **curium**, an alpha emitter, on his chest, face and in his nostrils. A DOE report credited **inadequate safety procedures** for this accident. Another July, '97, accident (a hazardous waste technician accidentally mixed nitric acid and alcohol while workers were "bulking," i.e., pouring spent chemicals into waste drums; this combination of chemicals could cause fire, explosion or fumes), resulted in fumes that triggered alarms and caused 25 workers to evacuate and LLNL to suspend "bulking" for a week.

1-4

4. **LLNL has a history of noncompliance with safety procedures.** As mentioned in #3 above, on **July 2, '97,** an LLNL worker was radioactively contaminated with **curium** in an accident that DOE itself admitted was due to inadequate safety procedures. **Also, in this instance, procedures that had been recently put into place with the State Department of Toxic Substances Control's (DTSC) guidance were apparently ignored by LLNL,** which raises questions about whether LLNL really follows agreed-upon safety procedures. This problem is underscored by another 1997 LLNL report (titled *Incident Analysis of Criticality Safety Control Infractions in building 332"*) confirming that a total of **15 criticality violations** (a "criticality accident" is a runaway nuclear chain reaction) occurred over a two-month period **(mid-May, '97 to mid-July, '97)** in LLNL's plutonium facility (Building 332) – where, again, **safety procedures were ignored.** Since then, **another criticality violation** has occurred in Building 332, underscoring the systemic nature of this problem.

1-5

5. **LLNL has a history of receiving Notices of Deficiency and Notices of Violation from the State Department of Toxic Substances Control, raising reasonable questions as to LLNL's good faith in complying with regulations and statutes, as well as with safety procedures implemented with the assistance of agencies such as DTSC.** Please see sections 6a through 6g of the above-referenced 12/9/97 letter from Tri-Valley CAREs to DTSC for details of LLNL's ongoing compliance problems.

1-6

6. **For years, LLNL's groundwater has been contaminated.** Although steps have been taken to monitor, control and remedy it, this environmental threat still persists. Some examples include: **1)** in 1997, LLNL's storm drains were found embedded with **mercury, an extremely toxic material. The drains may have contributed mercury-laden runoff to the already-contaminated groundwater, as well as to surface water and to soil;** and **2)** At LLNL's **Site 300** weapons testing station (located midway between Livermore and Tracy), during 1982-83 (and possibly again in 1996, 1997 and 1998), groundwater rose, saturating waste buried in disposal pits, and then receded, thus contaminating ground-water at deeper levels. At the recent **January 26, 1998 Site 300 TAG (Technical**

1-7

1-7 cont.

Assistance Grant) meeting with LLNL cleanup staff and representatives from various regulating agencies, Tri-Valley CAREs learned that, indeed, **Site 300 has a current, serious problem with elevated levels of tritium in the groundwater which has contaminated an aquifer** and which has formed a **tritium plume** nearly 2 miles long which must be dealt with before it reaches beyond the boundary of Site 300. The current elevated levels of tritium are, again, exacerbated by heavy rainfall which caused the groundwater to rise into tritium-contaminated disposal pits and then recede, taking tritium back into the groundwater at lower levels.

1-8

7. **LLNL has a history of sewer system problems.** LLNL's current "Interim Status" (from DTSC) liquid waste treatment process discharges treated wastewater (WW) **directly** into the Livermore municipal sewer. Theoretically, treated WW is safe for discharge into the sewer, but, in view of **1) LLNL's repeated violations** of its sewer discharge permit (see #2 above), **2)** past **sewer leaks** into the adjacent soil and groundwater, **3) the highly contaminated groundwater** at both the Main Site and Site 300 (see above), and **4) the close proximity of the surrounding communities** (Livermore and Tracy for the Main Site and Site 300, respectively), **it is reasonable to question the safety of this practice.**

1-9

8. **LLNL has a history of being out of compliance with safe storage requirements** (see # 5 & 6 above, also). Examples of this include: **1) "Old" waste** – LLNL has had many violations in how long it stores hazardous waste, e.g., in 1989-90, a DTSC inspector inspected 21 of LLNL's 100 hazardous waste site areas and found that 11 had waste **stored for more than 1 year** (1 year is the maximum allowed under California's Health & Safety Codes before such waste must be treated and/or disposed). **2) Undocumented satellite accumulation areas** – LLNL has **never provided DTSC** of these areas (where waste is kept "temporarily"), making inspection difficult to carry out. In the past DTSC **Notices of Deficiency** have been issued to LLNL for waste stored over 90 days. **3) Problems with mixed waste** -- DTSC has had difficulty in determining just how LLNL treats its mixed waste (i.e., hazardous waste combined with radioactive waste) in order to evaluate, among other things, whether **a)** an **incompatible wastes** are combined, and **b) cross-contamination** occurs between these two types of waste. One unanswered question is: Does LLNL ever label mixed waste as "radioactive?" In the past, Nevada Test Site, which accepts only radioactive waste, has returned waste shipments to LLNL because mixed wastes were included in the shipments, but were not labeled as such.

B. LLNL's Plutonium Facility (Building 332) has a history of problems with its High Efficiency Particulate Air (HEPA) filters and with ongoing criticality violations.

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Tri-Valley-CAREs has recently received DOE documents in response to an April,1998, Freedom of Information Act request for information concerning the maintenance of Building 332's HEPA filters. These responsive documents indicate that a **history of chronic safety problems** exists where these HEPA filters are involved. Tri-Valley CAREs' areas of concern include: **1)** the use of at least one type of HEPA filter that is **only partially qualified for nuclear applications**; **2)** the fragility of these filters – e.g., **they may fail when wet, hot, cold, or have too much air pressure applied**; **3)** the use of filters beyond the recommended length of time for on-line service (in some cases, they have been **in service for 20-30 years,** despite warnings by at least one LLNL Hazard Control Specialist that, for instance, filters should be retired at 8 years maximum); **4) DOE may not have a centralized division that oversees the use of HEPA filters complex-wide,** leaving each facility on its own to cope with the problem of protecting employees and the public from plutonium contamination; and **5)** LLNL may have **problems with storage and disposal** of old HEPA filters, thus encouraging the use of filters beyond recommended time periods, and also creating yet another area of concern re: radioactive waste at LLNL. (At least one document shows that used, off-line filters are considered to be TRU waste. If so, does this mean, for instance, that used filters have been accumulating for years at LLNL awaiting the opening of WIPP?).

1-10 cont. As mentioned above in section A.4, **a series of criticality violations** occurred in LLNL's Plutonium Facility during 1997-98. These violations resulted in the Defense Nuclear Facilities Safety Board recommending shut-down of the Plutonium Facility while investigations were being made as to inadequate adherence to safety regulations and guidelines. The Plutonium Facility has since been operating on a limited status, "restart" mode. Even then, an additional criticality safety violation has occurred (on August 7, 1998).

1-11 **In view of these concerns, among others, Tri-Valley CAREs strongly advocates that the above problems in Building 332 are clearly "significant new circumstances or information relevant to environmental concerns..." (40 CFR Parts 1500-1508, 10 CFR Part 1021) since the 1992 EIS/EIR for LLNL, thus requiring a new EIS/EIR.**

1-12 A further plutonium issue surfacing since the 1992 EIS/EIR is the discovery of plutonium up to 1,000 times "background" found in Big Trees Park, Livermore.

1-13 **C. DOE proposes significantly increased administrative limits for the amounts of plutonium and uranium to be on-site at LLNL, yet does not consider this major change important enough to require a new EIS.**

DOE wants administrative limits to be increased for both plutonium and uranium as follows:

1) The 1992 EIS/EIR goal for the amount of plutonium to be in Buildings 332 & 334 of the Superblock was to reduce it from 700 kg to 200 kg. DOE claims that this goal has not been achieved because only ½ of LLNL's inventory was relocated off-site, and other DOE facilities cannot take any more LLNL plutonium until after the year 2000. Therefore, DOE now asks that the total amount at LLNL be kept at **700 kg, with the eventual goal of reducing it. Tri-Valley CAREs considers this new goal a major change from the 1992 EIS/EIR which requires analysis per a new EIS.**

1-14

2) The 1992 EIS/EIR limit for uranium in the same buildings was 300 kg. **DOE now wants to increase the limit for enriched uranium to 500 kg and for natural uranium to 3,000 kg, an enormous increase!** Again, these new suggested goals are a **major change** from the 1992 EIS/EIR, which requires analysis per a supplemental EIS. If, as the DSA claims, these changes are to support RD&D (research, development and demonstration) of 1) plutonium immobilization and 2) technologies for uranium conversion, reuse, waste management and disposal, Tri-Valley CAREs then requests they be analyzed per a new EIS as major changes from the 1992 EIS/EIR.

1-15

1-16 **Since Tri-Valley CAREs knows, by virtue of DOE's own "Green Book," which describes DOE's intent to carry out new nuclear weapons R&D, and, since LLNL is a primary nuclear weapons design facility, Tri-Valley CAREs seriously questions DOE's given justifications for requesting these weapons-related materials' significant increases. Tri-Valley CAREs humbly reminds DOE that the "cold war" is supposedly over.**

1-17 **Further, to answer Tri-Valley CAREs' questions about why DOE wants increased administrative limits for uranium (e.g., is it for the U-AVLIS?), Tri-Valley CAREs requests that DOE lay out in detail the programmatic elements required under NEPA.**

D. New and/or changed programs at LLNL since 1992.

1-18 There are a plethora of new and/or significantly changed programs at LLNL since 1992, including the National Ignition Facility, the afore-mentioned U-AVLIS program, subcritical nuclear tests and the ADAPT work on plutonium at LLNL.

1-19 Tri-Valley CAREs, for all the foregoing reasons, among others, demands that the DOE's conclusion (i.e., that no supplemental EIS is required for LLNL and SNL) be put aside, and that, in its place, the conclusion be reached that, due to clearly "significant new circumstances or information relevant to environmental concerns..." (40 CFR Parts 1500-1508, 10 CFR Part 1021) **a new or, at a minimum, a supplemental EIS is required.**

Sincerely,

Marylia Kelley
Executive Director
Tri-Valley CAREs

Sally Light
Nuclear Program Analyst
Tri-Valley CAREs

RS
mk for
Rene Steinhauer
Community Organizer
Tri-Valley CAREs

ATTACHMENT A

Tri-Valley CAREs
Citizens Against a Radioactive Environment
5720 East Avenue #116, Livermore, CA 94550 • (510) 443-7148 • Fax (510) 443-0177

Peace Justice Environment since 1983

December 9, 1997

Cal/EPA
Dept. of Toxic Substances Control, Region 2
700 Heinz Avenue, Suite 300
Berkeley, CA 94710
Attn: Sheila Alfonso, Project Manager

Re: Lawrence Livermore National Laboratory's (LLNL) Application for a Hazardous Waste Treatment & Storage Facility Permit (WTSF).

Dear Ms. Alfonso,

This letter is Tri-Valley CAREs' (Citizens Against a Radioactive Environment) response to LLNL's application for the above-referenced WTSF permit on behalf of Tri-Valley CAREs' approximately 1900 family-members in the communities surrounding the Lawrence Livermore National Laboratory (LLNL). Our letter is part of the public comment mandated by the California Environmental Quality Act (CEQA) pursuant to this permitting process. Additionally, we submit this response on behalf of other interested organizations listed as signatories at the end of this letter.

Tri-Valley CAREs is a grassroots environmental organization that is a community-based "watch dog" over LLNL's activities. We also hold two U.S. Environmental Protection Agency Technical Assistance Grants to monitor environmental cleanup at both LLNL's Main Site and its Site 300 weapons testing station.

Tri-Valley CAREs was present at both Dept. of Toxic Substances Control's (DTSC) Sept. 23, 1997 Public Workshop (at which our Executive Director, Marylia Kelley, was a panelist representing the community viewpoint, giving a 15-minute presentation) and the Oct. 9, 1997 Formal Public Hearing. A number of our members spoke at these two events, and at least one member handed over a written comment to DTSC at the Hearing. We mention this to underscore Tri-Valley CAREs' members' ongoing participation as to their serious concerns re: risks to public health and to the environment created by LLNL's programs, most of which are related to the research and design of nuclear weapons, and which involve numerous toxic and nuclear substances.

Tri-Valley CAREs strongly advocates that the DTSC not issue LLNL a permit to

operate its own on-site Hazardous Waste Treatment & Storage Facility at this time for the following reasons:

1. An Environmental Impact Report (EIR) should be done at LLNL's Main Site and Site 300. For 45 years (since 1952), LLNL has generated a wide variety of nuclear and toxic wastes resulting from its work on nuclear weapons, fusion, lasers, etc. In 1987, LLNL's Main Site was placed on the National Priorities List as an **extremely contaminated "Superfund" site**. LLNL's Site 300 was added to the "Superfund" list in 1990. Since LLNL is already a "Superfund" site, rather than issuing a WTSF permit, which would allow LLNL to continue "business as usual," DTSC should carry out an EIR of LLNL's Main Site and Site 300, pursuant to **CEQA**. Further, a federal regulation promulgated by past DOE Secretary Watkins requires environmental review of DOE facilities, including LLNL, every 5 years (LLNL's last full EIS/EIR was in 1992, nearly 6 years ago, and therefore is out-of-date).

2. Recent excavation at LLNL's National Ignition Facility (NIF) construction site has uncovered unauthorized toxic waste dumping. In Sept., 1997, construction crews excavating earth at LLNL's NIF construction site ran into what appears to be an unauthorized "dumping ground." Excavated to-date are over 100 capacitors (reportedly from earlier fusion programs), with many leaking highly toxic PCBs, 75 crushed waste drums marked "radioactive," and contaminated soil (37 truckloads have already been sent to a Utah disposal site). **This discovery raises serious questions about LLNL's past hazardous waste practices.** Under the federal Resource Conservation and Recovery Act, which DTSC is authorized to implement in California, DTSC should require a comprehensive **RCRA Facility Assessment (RFA)** to identify the NIF "burial" site's areas of concern before proceeding any further with the WTSF permitting process. This RFA should augment other applicable state and federal regulations, and, we believe could be incorporated into the EIR on the overall site. Additionally, we are concerned that the proposed site for WTSF may also sit on top of unuathorized buried waste because it abuts the north side of the NIF construction site.

3. LLNL has chronic pollution problems. Under CEQA, DTSC, as the permitting agency, **must** take note of existing problems of on-site and off-site pollution at LLNL. As reported in May, 1997, the City of Livermore cited LLNL for chronic discharges of heavy metals and corrosive chemicals into the municipal sewer system. According to city officials, there had been **14 releases from LLNL above its permit limits since January, 1996, A rate of about one violation per month.** A February, '97, accident involved a discharge of silver, costing $41,000. Another discharge, in March, '97, this time of lead, cost $8,000.

4. LLNL has a history of frequent accidents right up to the present. This history includes a 1990 accident when **tritium** (radioactive hydrogen) spilled out of a tank at LLNL's Building 292, resulting in soil and groundwater contamination.

Examples of on-site accidents reported **just for 1997** include: **February** -- LLNL doctors cut a small hunk of **plutonium**-contaminated tissue out of an employee's thumb after the worker had accidentally stuck himself with a sliver of the radioactive metal during routing cleanup. **March** -- Three LLNL workers were contaminated recently when **uranium** filings caught fire. **April** -- It was reported that earlier this year, a **chlorine** gas leak forced about 20 workers to flee after an alarm sounded. **May** -- The City of Livermore cited LLNL, again, for chronic discharges of **heavy metals and corrosive chemicals**. Since January, 1996, LLNL has violated its permit discharge limits about once a month. **June** -- It was reported that in May, '97, two workers were contaminated with **tritium** (radioactive hydrogen) while packaging the radioactive waste in the Tritium Facility. **July** -- On July 2, workers shredding used air filters were **radioactively contaminated.** One worker was contaminated with **curium**, an alpha emitter, on his chest, face and in his nostrils. A DOE report credited **inadequate safety procedures** for this accident. Another July, '97 accident (a hazardous waste technician accidently mixed nitric acid and alcohol while workers were "bulking," i.e., pouring spent chemicals into waste drums; this combination of chemicals could cause fire, explosion or fumes), resulted in fumes that triggered alarms and caused 25 workers to evacuate and LLNL to suspend "bulking" for a week Certainly, it is reasonable that LLNL should not be issued a permit without DTSC's thorough investigation into LLNL's accidents and safety procedures, and, again, the appropriate vehicle is an EIR.

5. LLNL has a history of noncompliance with safety procedures. As mentioned in issue #4 above, on **July 2, 1997**, a worker at LLNL was radioactively contaminated with **curium** in an accident that DOE itself admitted was due to inadequate safety procedures. **Also, in this instance, procedures that had been recently put into place with DTSC's guidance were apparently ignored by LLNL,** which raises questions about whether LLNL really follows agreed-upon safety procedures. This is underscored by another recent LLNL report (see attached report, *"Incident Analysis of Criticality Safety Control Infractions in Building 332"*) confirming that a total of **15 criticality violations** (a "criticality accident" is a runaway nuclear chain reaction) occurred over a two-month period **(mid-May,'97 to mid-July,'97)** in LLNL's plutonium building (Building 332) -- where, again, **safety procedures were ignored.** This internal LLNL report reveals deep, pervasive, systemic deficiencies in management, worker understanding and employee attitudes, citing **1) inadequate training**, with **workers unaware of rules** and some even stating that there is nothing wrong with violating rules to get a job done; and **2) ineffective management**, with supervisors not recognizing the problem. **It is therefore reasonable that DTSC should not rely on informally advising LLNL re: safety procedures, but should use formal processes (such as an EIR) to ensure LLNL's compliance with safety procedures.** Moreover, Tri-Valley CAREs has an information request into DOE regarding a **subsequent criticality violation.** We have been told that report is in draft, and is not yet publicly available. Again, this underscores the systemic nature of the problem.

6. LLNL has a history of receiving Notices of Deficiency and Notices of Violations from DTSC, right up to the present, as seen in the following:

a. A May 21, 1997 letter from Rick Robison, Unit Chief of DTSC's Statewide Compliance Division to Harry Galles, Head of LLNL's Environmental Protection Dept., cites the following **combined waste (CW) violations**: **1)** possible hazardous & radioactive constituents of CW remaining on-site weren't identified; **2)** waste generating processes for wastes inspected were not identified; **3)** accumulation start dates of CW were not listed at Satellite Accumulation Areas; **4)** the treatment process description, as well as the reason for the treatment, for CW that was treated and then sewered was not provided, nor was information provided regarding the disposition of the sludge produced by the treatment process; **5)** a date of treatment was not provided; **6)** no information was provided for attempts to find available treatment and/or disposal options for CW; **7)** no manifest number was given for CW shipped off-site.

b. A May 23, 1997 Inspection Report by Barbara Barry, Hazardous Substances Scientist with DTSC's Statewide Compliance Division, refers to the **May 23, 1993 Stipulation and Order #HWCA 93/94-047 signed by DTSC and LLNL for the latter's violations of the Hazardous Waste Control Law from 1989 until 1992.**

c. Ms. Barry's May 23, 1997 Inspection Report also cites **later violations** by LLNL, including: **1) DTSC's 8-14-92 Compliance Evaluation Inspection (CEI) report's findings of 11 violations** including storage of incompatible wastes, failure to certify a repaired tank before returning it to service, having an open waste container, and failure to complete employee training; **2) DTSC's 8-6-93 CEI report's findings of 17 violations,** including improper storage of incompatible wastes, incomplete inspection logs, inadequate aisle space in waste storage area, improper labeling of hazardous wastes, inadequate employee training, failure to do tank certification, storage of waste over 90 days without authorization, failure to maintain land ban notification/certification records, and falsification of records; and **3) DTSC's 6-1-94 field-issued CEI report's findings of 7 violations,** including storage of hazard-ous waste over 90 days without authorization or permit, failure to properly label hazardous wastes, failure to meet treatment standards, notification failures, failure to maintain inspection logs with required information, failure to inspect hazardous waste tankers each operating day, and failure to provide annual refresher employee training.

d. Ms. Barry's May 23, 1997 Inspection Report also describes how **LLNL's Total Waste Management System (TWMS),** a method of tracking waste sitewide (e.g., waste source, treatment method, treatment results, storage, discharge, movement throughout the site, ultimate destination, shipping date and manifest number) using computer and waste drum bar codes, was **inoperable** at the time of her

inspection.

e. Ms. Barry's May 23, 1997 Inspection Report also cited LLNL for violating **1)** 22 California Code of Regulations section 6626.23(a) (1-3); (b) and (e) for **shipping CW off-site without a manifest; 2)** 22 CCR 66265.71(a)(1-6) for **receiving CW from Site 300 without a manifest; (3)** 22 CCR 66262.34 (f) (1-3) for **storing CW labeled "Radioactive Waste Only,"** instead of using the required hazardous waste label (the statute requires hazardous waste labels for all Resource Conservation and Recovery Act (RCRA) wastes, all mixed wastes, all California wastes and all combined wastes, in addition to any labeling required by the AEC (sic) for the radioactive portion of the waste); **4)** California Health and Safety Code (CH & SC) sections 25200.5(b)(1-2) and (c), and 25201(a) for **storing and treating CW's not listed** on the DTSC-approved Part A permit as well as **treating CW with processes not listed** on the DTSC-approved Part A permit, and also for **storing CW for more than 1 year** without DTSC's written authorization (this latter also violates CH&SC section II part 1(a) and the Interim Status Document issued by DTSC); **5)** 22 CCR 66265.13(a)(1) and (b)(1-2) for **excluding from its Waste Analysis Plan (WAP) the appropriate methodolgy and parameters for making analyses** of California hazardous wastes as well as RCRA hazardous wastes; and **6)** 22 CCR 66265.16(a)(1-2) and (3)(A-F); (c) and (d)(3) for **inadequate training procedures**, in that a) LLNL's Training Plan for employees in the Hazardous Waste Management Dept. (HWMD) was below minimum requirements, and b) the WAP requires extensive lectures and practical training in sampling procedures and the handling of samples, yet none of the HWMD training descriptions referred to any practical training other than first aid and fire/earthquake training.

f. DTSC's 3-7-97 Notice of Deficiency re: LLNL's Part B Application for the WTSF permit now under consideration signed by Pauline Batarseh, Unit Chief of DTSC's Northern California Permitting Branch, found **160 deficiencies.**

g. As of this writing, **DTSC is carrying out an investigation of the July 2, 1997 curium-contamination accident** (see issue #4 above) in view of LLNL's having ignored safety regulations recently implemented with DTSC's guidance.

The above samples of ongoing compliance problems at LLNL raise reasonable questions as to LLNL's good faith in complying with regulations and statutes, as well as with safety procedures recently implemented with DTSC's assistance. Further, If LLNL has not been complying with its Part A permit, or its "Interim Status" authorization, can it now be trusted to comply with a Part B permit even if that permit has mitigtion measures? Again, we ask that DTSC carry out an EIR before making its decision whether to issue a Part B WTSF permit.

7. For years, LLNL's groundwater has been contaminated. Although steps have been taken to monitor, control and remedy it, this environmental threat still persists. Some examples include: **1)** earlier this year, LLNL found its storm drains embedded with large amounts of mercury -- an extremely toxic material. **The drains may have contributed mercury-laden runoff to the already-contaminated groundwater, as well as to surface water and to soil; 2)** LLNL has acknowledged that there's a possibility that they will run into contaminated groundwater while excavating the **NIF site** (they've applied for a dewatering permit to pump the area dry, if necessary); and **3)** at LLNL's **Site 300** weapons testing station (located midway between Livermore and Tracy), during 1982-83 (and possibly again in 1996), groundwater rose, saturating waste buried in disposal pits, and then receded, thus contaminating groundwater at deeper levels.

8. LLNL has a history of sewer system problems. LLNL's current "Interim Status" liquid waste treatment process discharges treated wastewater (WW) **directly** into the Livermore municipal sewer, and the WTSF permit as written would allow this practice to continue. Theoretically, treated WW is safe for discharge into the sewer, but, in view of **1)** LLNL's repeated violations of its sewer discharge permit (see above), **2)** past sewer leaks into the adjacent soil and groundwater, **3)** the highly contaminated groundwater at LLNL (see above), and **4)** the close proximity of the surrounding community, it is reasonable to question the safety of this practice.

9. LLNL has a history of being out of compliance with safe storage requirements (see issue #6 above for additional discussion). Examples of this include: **1) "Old" waste** -- LLNL has had violations in how long it stores hazardous waste, e.g., in 1989-90, a DTSC inspector inspected 21 of LLNL's 100 hazardous waste areas and found that 11 had waste **stored for more than 1 year** (1 year is the maximum storage period allowed under California's Health & Safety Codes before such waste must be treated and/or disposed). **2) Undocumented satellite accumulation areas** -- LLNL has **never provided DTSC** with lists of its satellite accumulation areas (where waste is kept "temporarily"), making inspection difficult to carry out. In the past, **Notices of Deficiency** have been issued to LLNL by DTSC for waste stored beyond the 90-day limit. **3) Problems with mixed waste** -- DTSC has had difficulty in determining just how LLNL treats its mixed waste (i.e., hazardous waste combined with radioactive waste) in order to evaluate, among other things, whether **a)** any **incompatible wastes** are combined, and **b) cross-contamination** occurs between these two types of waste. One unanswered question is: Does LLNL ever label mixed waste as "radioactive?" In the past, Nevada Test Site, which accepts only radioactive waste, has returned waste shipments to LLNL because mixed wastes were included in the shipments, but were not labeled as such.

10. Problems with LLNL's Application (see issue #6 f above for additional discussion). DTSC has accepted LLNL's underlying 11-volume WTSF permit application as the permit's basic "game plan." However, LLNL's application

has inadequacies. One example is: **Wastewater (WW) analysis and discharge** -- As mentioned above, all of LLNL's WW is first combined and then discharged from a single point within LLNL. **It then flows directly to the Livermore Water Reclamation Plant (LWRP).** Per an agreement between LLNL and LWRP, a DTSC-certified lab is not required to verify WW analyses prior to discharge into the sewer. The given rationale is that verification by LLNL facilities shortens the turn-around time for sample collection and analysis. However, this contrasts with **other** LLNL waste analyses, which **are** required to be done by DTSC -certified labs. In view of LLNL's history of accidents and discharge violations (see above), and to ensure public health & safety and the environment, it is reasonable that **DTSC, as a condition of either LLNL's "Interim Status" authorization, OR a WSTF permit, should require some sort of oversight by DTSC-certified labs** of such verification prior to WW discharge into the sewer (assuming that a completed CEQA EIR has examined all issues and alternatives and points toward an "all-clear" for a permit to be issued -- see discussion above).

11. Problems with DTSC's Initial Study (IS) and Draft Negative Declaration (Neg Dec). Pursuant to CEQA, before issuing a WTSF permit, DTSC must complete an IS based on LLNL's application and then draft **either 1)** a Neg Dec (a statement that there will be no significant impacts to the environment), **or 2)** a Mitigated Neg Dec (a statement that there will be impacts which will be remedied by conditioning the permit on LLNL's carrying out mitigation measures), **or 3)** require an Environmental Impact Report (EIR) be done if DTSC has found the facility **could have** a significant effect on the environment. **In this case, although we recommend an EIR be done (since it is patently obvious to us that, in view of the problems already discussed, LLNL's proposed facility has a great likelihood of causing significant environmental impacts), DTSC has chosen to draft a Neg Dec based on its completed IS.** Both the IS and the Neg Dec have inadequacies, including:

a. Offsite transportation of waste. The IS fails to describe the routes and destinations for transporting hazardous waste from LLNL to dumpsites. Only LLNL's peripheral streets and on-site roads are described. **When it leaves LLNL, where does the waste go and how does it get there?** These are major questions because of waste transport's potentially adverse impacts on public health and safety, as well as on the environment.

b. The IS fails to address waste streams. The IS should describe where waste streams are generated, name hazardous substances involved, as well as their amounts, and indicate the movements of waste streams within LLNL. The IS fails to do this.

c. Seismic Issues. The IS states that all buildings at LLNL either meet or exceed the 1994 Uniform Building Code seismic requirements for concrete and steel

structures, implying that the buildings could withstand seismic activity. Yet, LLNL's permit application has a letter to LLNL from Geomatrix Consultants that concludes "...evidence ... **could** provide documentation for compliance with the seismic location standard. **However, it is recognized that after reviewing the same evidence other reasonable people may disagree with these conclusions."** (emphasis added) That is, such compliance is disputable and uncertain by reasonable seismic consulting industry standards. Another report, from Public Geotechnical Engineering, conditions satisfactory seismic standards compliance on **1)** high foundation capacities, **2)** replacement of silty-clay soils with well-compacted soil fill, and **3) reviews every three years.** This may indicate a need for constant scrutiny of a chronic problem. Additionally, there is no real analysis of earthquake risk based on **1)** the crack opened in LLNL's southeast corner (near where waste is stored), that may have been caused by a 1980 quake, or on **2)** other past seismic events (the area is very active seismically).

d. Small Scale Treatment Laboratory. According to the IS and LLNL's application, there would be a "small scale" treatment lab within the larger WTSF complex, purportedly to process small amounts of waste. There appear to be at least four major problems with this: **1)** the "small scale" lab's waste processing limits would be up to **250 kg per day**, a large amount of waste, not "small scale;" **2)** LLNL would be able to process these wastes without much more than **slim bureaucratic oversight** by DTSC (LLNL would be allowed to work up individual plans for this lab); **3)** DTSC could **waive the 250 kg per day limit case-by-case**, depending upon the specific plan submitted by LLNL; and **4)** there are **no provisions for public notice and participation.** Altogether, this section seems to be a "loophole" potentially allowing LLNL to conduct hazardous waste processing without adequate regulation and public participation.

e. Future On-Site Land Use. The IS does not adequately deal with possible future increases in hazardous waste production amounts and whether the facility would be able to handle them. This issue also relates to cumulative impacts (see below).

f. Cumulative Impacts. The IS inadequately addresses the question of how the hazardous waste processes would interface with LLNL's other activities, i.e., how **all** LLNL's activities would impact the environment, as well as human health and safety.

g. The IS concludes that the proposed project COULD NOT have a significant impact on the environment. This is a challengeable conclusion, since, as discussed previously, LLNL is a highly-contaminated Superfund site with an ongoing history of accidents, pollution and unauthorized dumping of hazardous waste (done under DTSC's "Interim Status" authorization), raising reasonable questions about the proposed project's **future** impacts to the environment.

h. The Draft Negative Declaration is Ambiguous. Despite its title of "Draft Negative Declaration," DTSC's Neg Dec contains language that makes it unclear whether DTSC is drafting a straightforward Neg Dec (i.e., without required mitigative measures) or a Mitigated Neg Dec (i.e., with required mitigative measures). Further, only small projects normally receive a Neg Dec without mitigated measures, while LLNL is a **major nuclear facility** producing a wide range of hazardous and mixed (as well as radioactive wastes). Under the circumstances, it's reasonable that the DTSC, even if it believes there are no risks to health, safety & environment (which is a challengeable conclusion), explore **some sort** of mitigation measures such as waste reduction or pollution prevention.

In conclusion, Tri-Valley CAREs requests that DTSC not issue LLNL a WTSF permit at this time. For all the reasons discussed above, we ask that DTSC require a thorough environmental investigation (i.e., an EIR, as detailed above) of both LLNL's Main Site and Site 300 to determine whether, in light of LLNL's "Superfund" site status and in view of LLNL's lengthy history of hazardous waste accidents, spills, releases and violations, a WTSF permit should be issued. Tri-Valley CAREs would be happy to provide "scoping" and other comments regarding the EIR. First, however, DTSC must determine that one will be done.

We look forward to your response to this public comment.

Sincerely,

Marylia Kelley
Executive Director
Tri-Valley CAREs

Sally Light
Nuclear Program Analyst
Tri-Valley CAREs

Additional Signatories:

1. Ban Waste -- Phil Klasky, Director
2. Bay Area Action -- Susan Stansbury, Director
3. Buddhist Peace Fellowship -- Alan Senauke, Director
4. Center for Economic Conversion -- Michael Closson, Executive Director
5. Citizens Opposing a Polluted Environment (COPE) -- Jami Caseber, Director
6. Committee to Minimize Toxic Waste -- Gene Bernardi & Pamela Sihvola, Co-Chairs
7. Earth Island Institute -- John Knox, Executive Director
8. Mount Diablo Peace Center -- Dennis Thomas, Administrator
9. Nuclear Democracy Network -- Mary Beth Branagan, Co-Director
10. Planning and Conservation League -- Gary Patton, General Counsel
11. Physicians for Social Responsibility, Greater San Francisco Bay Area Chapter -- Dr. Robert Gould, President

12. San Jose Peace Center -- Joni Thissen, Coordinator
13. San Mateo County Peace Action -- Max Bollock, President
14. Sierra Club California -- Bonnie Holmes-Gen, Senior Lobbyist
15. St. Joseph the Worker -- Father Bill O'Donnell, Social Justice Committee
16. Sonoma County Center for Peace and Justice -- Elisabeth Anderson, Executive Director
17. Toxics Asessment Group -- Thomas C. Sparks, CEO
18. Western States Legal Foundation -- Mike Veiluva, Foundation Counsel

cc: Secretary Federico Pena, DOE Headquaters, Washington D.C.
Assistant Secretary Al Alm, DOE Headquaters, Washington D.C.
Jim Turner, DOE, Oakland, California
Jim Davis, DOE, Oakland, California
Bruce Tarter, Lawrence Livermore National Laboratory
Mike Gill, U.S. Environmental Protection Agency, San Francisco, California
Kathy Setian, U.S. Environmental Protection Agency, San Francisco, California
U.S. Senator Dianne Feinstein
U.S. Senator Barbara Boxer
U.S. Representative Ellen Tauscher
U.S. Representative Pete Stark
U.S. Representative George Miller
U.S. Representative Nancy Pelosi
U.S. Representative Lynn Woolsey
U.S. Representative Richard Pombo

Sources - Tri-Valley CAREs requests that the following sources, along with the organization's comments, be made part of the Administrative Record:

Incident Reports/Occurrence Reports/Other Reports:

Incident Analysis of Criticality Safety Control Infractions in Building 332, IA 0485, August 15, 1997, Lawrence Livermore National Laboratory

"Lawrence Livermore National Laboratory -- Building Evacuated," Daily Operations Report, May 2, 1997, DOE Oakland Operations Office.

"Lab's staff was found lacking in radiation safety training," *The Valley Times,* February 11, 1997.

"Uranium called risk to lab staff, not public," *The Valley Times,* January 16, 1997.

Violations:

"Violations curtail lab plutonium operations," *The Valley Times,* October 30, 1997.

"Lab violations," *Tri-Valley Herald,* October 18, 1997.

"Lab Exceeds Sewer Limits," *The Independent,* May 14, 1997.

"Livermore cites lab for sewer discharge," *The Valley Times,* May 10, 1997.

"Lab violations," *Tri-Valley Herald,* May 10, 1997.

Accidents:

Type B Accident Investigation Board Report of the July 2, 1997 Curium Intake by Shredder Operator at Building 513 Lawrence Livermore National Laboratory, Livermore, California, DOE/OAK-504, Rev. 0,U.S. Dept. of Energy, Oakland Operations Office.

"Lab accident a result of poor safety," *The Valley Times,* September 13, 1997.

"Lab technician exposed to radiation, report says," *Tri-Valley Herald,* September 13, 1997.

"Livermore lab looks into odd radiation exposure of worker," *The Valley Times,* July 4, 1997.

"Worker exposed to radiation at Lab," *Tri-Valley Herald,* July 4, 1997.

"25 Livermore lab workers evacuate after accident," *The Valley Times.* July 25, 1997.

"Plutonium spills on 3 lab workers," *Tri-Valley Herald," August 7, 1987.*

"Lab chlorine leak forced evacuation," *The Valley Times,* April 9, 1997.

"Site 300 blaze," *Tri-Valley Herald,* May 9, 1997.

"Mishap wrecks a dozen lasers," *The Valley Times,* May 3, 1997.

"Lab evacuation," *Tri-Valley Herald,* May 3, 1997.

"3 lab workers contaminated with uranium traces," *The Valley Times,* February 11, 1997.

"Radioactive material put out shortly after catching fire," *Tri-Valley Herald,* February 11, 1997.

"Lab worker contaminates finger," *The Valley Times,* February 9, 1997.

"Plutonium exposure," *Tri-Valley Herald,* February 8, 1997.

"Lab tracks exposure to metals," *Tri-Valley Herald,* June 29, 1994.

National Ignition Facility (NIF):

Discovery of Leaking Buried Capacitors (NIF Constr Site), Lawrence Livermore National Laboratory, Daily Field Management Report, DOE, September 9, 1997.

"Investigators check lab for additional toxic waste," *Tri-Valley Herald,* September 11, 1997.

"Lab discovers 112 capacitors with PCBs at superlaser site," *The Valley Times,* September 11, 1997.

"Toxic waste discovery rattles EPA, scientists," *Tri-Valley Herald,* September 16, 1997.

Monthly report dated June 20, 1997, from James Littlejohn (Project Leader, Environmental Restoration Division, DOE/OAK) and Albert L. Lamarre (Livermore Site Project Leader, Environmental Restoration

Division, UC/LLNL) to Robert Feather (DTSC), Michael Gill (U.S. EPA - San Francisco Office) and Michael Rochette (Regional Water Quality Control Board - San Francisco Bay Region) re: LLNL Livermore Site may 14, 1997 Remedial Project Managers' Telephone Conference Summary.

"NIF foes move to stop project, citing toxic find," *The Valley Times,* September 23, 1997.

"laboratory staff faces toxic waste charges," *The Valley Times,,* September 23, 1997.

"Judge orders Livermore Lab to search for buried wastes," *The Valley T Times,* October 28, 1997.

"Livermore Lab to expand search for toxic waste," *Tri-Valley Herald,* October 28, 1997.

Public Meetings:

" "Volatile" reaction at lab meeting," *Tri-Valley Herald*, July 20, 1997.

"Lab's Site 300 cleanup on tap," *Tri-Valley Herald",* June 22, 1997.

"Citizen's Watch" Newsletters:

Each 1997 edition of Tri-Valley CAREs' monthly newsletter (except for February, 1997), *Citizen's Watch*, contains coverage of issues that are relevant to Tri-Valley CAREs' comment on LLNL's application for the WTSF permit. Therefore, to conserve space, we refer to them collectively here.

Federal Statutes

Resource Conservation and Recovery Act (RCRA).

California Statutes and Regulations:

California Environmental Quality Act (CEQA).

Title 22 California California Code of Regulations sections 6626.23(a)(1-3), (b) and (e); 66265.71 (a)(1-6); and 66262.34(f)(1-3). (CCR)

3.3 Document 2: U.S. Enrichment Corporation (USEC)

USEC
A Global Energy Company

February 25, 1999

Ms. Lois Marik
U.S. Department of Energy
Lawrence Livermore National Laboratory
7000 east Avenue
Livermore, California 94550

RE: Comments on Draft Supplement Analysis for Continued Operation of Lawrence Livermore National Laboratory and Sandia National Laboratory, Livermore DOE/EIS-0157-SA-01

Dear Ms. Marik:

The United States Enrichment Corporation (USEC) has reviewed the Draft Supplement Analysis for the Environmental Impact Statement (EIS) for the Lawrence Livermore National Laboratory (LLNL). We would like to supply comments addressing the adequacy of the document in general, and a specific comment we believe will add clarity.

2-1 The analysis appears to be both comprehensive and thorough. All areas of potential impact were reviewed and adequately addressed. The Supplement Analysis meets the intent of the National Environmental Policy Act in that, as a planning document, it identifies areas of the environment that need to be protected in future activities.

2-2 One change we suggest to add clarity to the document is to revise an entry in Table 1.1. Specifically, the wording under "*Discussion*" to "Follow-ons to U-AVLIS" would indicate that only USEC performed NEPA review for this activity. The environmental review for this activity was done as a joint effort. Under an interagency agreement between USEC and DOE, USEC did have the lead in preparing the Environmental Assessment document. However, the analysis was performed jointly by USEC and the LLNL staff, with close involvement by DOE. The Finding of No Significant Impact was issued jointly by DOE and USEC. We suggest you change the entry under "*Discussion*" to read "Joint NEPA review by U.S. Enrichment Corporation (USEC) and DOE".

Sincerely,

T. Michael Taimi
Manager, Environmental Assurance and Policy

6903 Rockledge Drive, Bethesda, MD 20817-1818
Telephone 301-564-3200 Fax 301-564-3201 http://www.usec.com
Offices in Livermore, CA Paducah, KY Portsmouth, OH Washington, DC

3.4 Document 3: Briefing Transcript, Livermore, February 11, 1999, 2:00 p.m.

TRANSCRIPT OF COMMENT AND QUESTION PORTION

OF PUBLIC BRIEFING

Regarding:

DRAFT SUPPLEMENT ANALYSIS
FOR
CONTINUED OPERATION OF
LAWRENCE LIVERMORE NATIONAL LABORATORY AND
SANDIA NATIONAL LABORATORIES, LIVERMORE

Proceedings before: BARRY LAWSON, Facilitator

Thursday, February 11, 1999

2:00 p.m. session

Taken by LETICIA A. RALLS,
a Certified Shorthand Reporter,
in and for the State of California
CSR No. 10070

PROCEEDINGS

BE IT REMEMBERED, on Thursday, the 11th day of February 1999, commencing at the hour of 2:09 p.m. of said day, at the LAWRENCE LIVERMORE NATIONAL LABORATORY, EAST GATE VISITOR'S CENTER, Trailer No. 6525, Greenville Road, Livermore, California, before me, LETICIA A. RALLS, a Certified Shorthand Reporter in the State of California, the said briefing proceedings were had.

APPEARANCES

BARRY LAWSON, of BARRY LAWSON ASSOCIATES, Mountain Road, P.O. Box 26, Peacham, Vermont 05862, appeared as the Facilitator.

LOIS MARIK, of the DEPARTMENT OF ENERGY, Deputy Director for Livermore Operations Division, appeared as the presenter and as a panel member.

CHUCK TAYLOR, of PAI CORPORATION, appeared as a panel member.

MICHAEL LAZARO, of ARGONNE NATIONAL LABORATORY, Chicago, Illinois, appeared as a panel member.

APPEARANCES (continued)

KENNETH ZAHN, Group Leader, Environmental Evaluations Group of LAWRENCE LIVERMORE NATIONAL LABORATORY, appeared as a panel member.

KATIE MYERS and CAROL KIELUSIAK of LAWRENCE LIVERMORE NATIONAL LABORATORY, appeared as notetakers.

LIBBY STULL of ARGONNE NATIONAL LABORATORY, appeared as a notetaker.

---oOo---

(Whereupon, subsequent to Ms. Marik's presentation, the following comment and question period began at 2:27 p.m.)

PROCEEDINGS

THE FACILITATOR: Thank you very much.

Okay. Let's start our comment period. I invite you to go one at a time for an initial period of a maximum of five minutes or thereabouts, whether asking questions or making comments regarding the Supplement Analysis.

I would ask you to introduce yourself and your affiliation, if you like, and indicate before you start whether you're offering a question or a comment so that the people who are taking notes will be primed for either one.

Now, I don't know how many people plan to make comments, and I don't want to be -- and I don't feel like being in the mood to be a harsh timekeeper here, but I do want to make sure that with the number of people in the room, most of whom I don't know, that we go at least through one round of five minutes, and then there will be plenty of time for more questions, if you have any.

If you are coming near within that five minutes, I'll ask you to complete your first round as gracefully and graciously as possible. Okay.

Also, if you have written comments with you today, you're certainly welcome to submit those. As I said before, oral comments and written comments are given the same amount of credence.

Okay. Is there anybody here who would like to speak after all that?

THE COMMENTOR: I'll go.

THE FACILITATOR: Please.

THE COMMENTOR: Could I talk here?

THE FACILITATOR: If you could at least stand, if it would make it easier. If you'd like to come up here?

THE COMMENTOR: Yeah. It's easier.

THE FACILITATOR: Sure. Come on up.

THE COMMENTOR: My name is Sally Light. I'm from Tri-Valley CAREs, Communities Against Radioactive Environment. We did prepare a written comment, and I'm just going to briefly use that as a consulting kind of note that I can look at as I'm talking.

And I'm going to only do part of this, and then I'll share it with my colleague, our Executive Director, Marylia Kelley, who will finish it out.

Just to briefly mention that most people here probably know who we are, but we've been

around for 16 years, right here in Livermore. We're a watchdog group, grassroot environmental organization that watchdogs the Lab here. And we've been intimately involved in the history of the Lab in a way and in the community, and we continue to do so.

Just basically, we really are very concerned -- I mean, as I'm looking at the actual analysis and the presentation today, it just seems to be a very perfunctory kind of presentation that everything is just fine and hunky-dory at the Lab here; there's no need for any kind of an EIS/EIR again. And we very much oppose that view. 3-1

We feel at Tri-Valley CAREs that an EIS/EIR, a new one, needs to be done. And I'll just break it down to why, some of the reasons.

For one thing, since 1992, the Lab has remained a Superfund Site; both Main Site and Site 300 still are on the national priorities list. 3-2 That, in itself, says to me that there are still problems that need to be -- big problems that need to be resolved here and that there are I believe -- ex-Secretary of DOE Watkins, actually during his time, there was a regulation that came up that 3-3 these DOE facilities really are required to go

through some sort of environmental analysis again every five years.

3-3 cont. And I know that maybe that doesn't specifically lay out the fact that it should be an EIS/EIR every five years, but we feel in this case that it does merit that.

3-4 So the Lab here continues to have chronic 3-5 pollution problems. It's had frequent accidents involving radioactive and toxic contaminants.

3-6 These problems are also chronic with non-compliance of safety regulations. The Lab has received numerous notices of deficiency and notices of violations from the State Department of Toxic Substances Control which is indicative of problems ongoing since 1992.

3-7 It's continued to have groundwater contamination problems both here and at Site 300. 3-8 There are also sewer system problems in terms of releases into the municipal sewer system from Main Site. 3-9 And the Lab continues to have problems with non-compliance with safe storage requirements.

All of this we have documented on, and I have attached to our report our comment, a previous letter that we worked up for -- as a response to -- as a comment, a public comment to the Part B Permit

Application that the DTSC right now is considering for the Lab.

And so a lot of this draws on material that I developed in 1997. And this is all documented, and I have it here. So I'm just summarizing from that.

I really don't want to take a lot of time to go into the details, unless people ask questions, but to go on to the other thing that I wanted to mention is that in terms of the increased administrative limits for plutonium and uranium in the Super Block buildings that were presented here, it's interesting that it seems that in some cases these are very significant increases, and yet the DOE doesn't consider these major enough to require 3-10 a new EIS.

And under the CFR sections that have to do with when you do need some kind of a new environmental analysis, it says, you know, significant new circumstances or information relevant to environmental concerns.

And I do feel that when you're dealing with such deadly materials as uranium and plutonium, 3-11 that certainly does come into environmental concerns both for the employees here and for the

3-11 cont.

community outside who are relying on the Lab's HEPA filtration system to actually try to protect them against releases and so forth.

I think that these major changes do warrant a new EIS/EIR just on that basis alone as far as that section of it.

And also there are other issues here. I mean, we are not -- we wonder why you really -- I mean, I understand that the report is saying that in terms of the uranium that they are to support the RD&D, the Research Development & Demonstration, of plutonium immobilization and technologies for uranium conversion, reuse, waste management and

3-12

disposal, but that just doesn't seem to fit it because, for one thing, we know from the DOE's "Green Book" that the DOE intends to carry out new nuclear weapons research and development, and the Lab here is a primary nuclear weapons laboratory.

3-13

So we are seriously questioning the given justifications in this report for having significant increases of these weapons-related materials. And we are humbly reminding you that the Cold War is supposedly over.

3-14

And then also we would like to know specifically NEPA programmatic element analysis

3-14 cont.

which is required for such a large change in such a significant increase in terms of the uranium amounts, is it going to be specifically for the U-AVLIS? I mean, can we have some information? It is just very -- I just don't know from looking at this report what they're really talking about.

Those are some of my major concerns. And, as I say, we have copies of our comments, and I have attached the comments before to the DTSC on which a lot of this is based. And so we are very interested in passing out this information, and we do have a few copies with us today.

Thanks.

THE FACILITATOR: Very well done. Thank you.

Is there somebody else who would like to speak? Please.

THE COMMENTOR: And I'm too chicken to step over this chair.

THE FACILITATOR: Yes, please.

THE COMMENTOR: Hi. I'm Marylia Kelley, and I'm Executive Director at Tri-Valley CAREs, and I also live on East Avenue right between Vasco and Charlotte.

So I'm speaking today, as well, as a very

close neighbor of the Livermore Laboratory and as someone who has raised a child and lived in this community since 1976.

And again, I want to reiterate that Tri-Valley CAREs has looked at the Supplement Analysis and looked at the daily sort of operations of the Lab and the proposed operations of the Lab

3-15

and believe beyond a shadow of a doubt that a new environmental impact statement is required in this instance.

I'll just talk again about a couple of things, since I have five minutes, and invite people to ask us for copies of our comment if they would like the details, and also out on the table is a sign-up sheet if folks want to get our newsletter and any other information that we have.

We've been doing some research on the Plutonium Facility, that's the Building 332 discussed, and the history of problems with the HEPA filters in that building.

3-16

And again, there has been burning of plutonium to oxidize the chips, and that's an extremely dirty enterprise. And we need more information on that and the projected plans for the future.

3-17

In addition, just to digress a little bit, uranium chips are also burned. And that's equally dirty, and we equally need information on how much of that is going on at present and how much of that is projected into the future.

Also, Sally, you didn't have time to really cover the documents we got back from the HEPA Information Act request, right?

PREVIOUS COMMENTOR: No.

THE COMMENTOR: Okay. We have a lawsuit in under the Freedom of Information Act for documents that the Department of Energy and the Lab have not given us in a timely manner, and, after filing the lawsuit, they have begun showing up.

So thank you for what's come, and we expect another batch soon.

The documents that we have so far indicate a history of chronic safety problems. There's one type of HEPA filter that's discussed that's only partially qualified for nuclear applications.

3-18

The filters we know theoretically but now we know from internal documents that this is a problem. They are very fragile. They fail when wet, hot, cold, or just plain have too much pressure applied. And all of those things have

3-18 cont.

been a problem in the Plutonium Facility here at Livermore.

The use of filters has gone on here way beyond the recommended length of time in service. What that means is somebody, maybe even here -- but Lab folk have said eight years is about what they should stay in and then they should be changed out.

There are filters that were in for 20 to 30 years. That means that they're building up gunk. That means that a little rip, and all the gunk that's in them gets out, you know, just to put it in real plain language.

And it also means they're getting increasingly fragile so that there are increasing opportunities for those kinds of leaks into the air. There have been numerous documents regarding problems inside the facility, including having rips in the duct where the plutonium dust has fallen out.

So this is a safety issue for workers and for the public. And these are things that were not really part of the 1992 EIS. Information has come to light since then, and they're also not problems that were solved back then.

3-18 cont.

So these are current and ongoing problems which need to be analyzed in a full NEPA, that's National Environmental Policy Act, kind of document.

DOE may not have a centralized division that oversees the use of HEPA filters complex-wide. The documents we have suggested each facility is kind of on its own to develop some of these things and that they are in many cases inadequately tested.

And also, Livermore Lab appears to have problems with storage and disposal of the filters and that -- the fact that they don't have a disposal available, as discussed in the documents we have, may be one of the reasons why they're left in so long.

And you just heard, "We don't need to do an EIS because we think we're going to reduce our transuranic waste by 75 percent."

Well, does that mean leaving HEPA filters in the Plutonium Facility for decades and decades? What if those filters were changed out and regularly, which they need to be as a safety measure? What does that do to the waste stream?

These things are all things that should be analyzed in a full EIS.

3-19

And also, are we assuming -- what kind of assumptions are being made about whip opening and other things that may or may not happen? And what kind of contingencies exist? All of that needs to be part of an EIR/EIS.

3-20

Also, the plutonium was discovered in Big Trees Park, right across the street and down the road from me where my son grew up playing. Again, discovered since 1992, the Lab has gone out three -- well, there have been three samples: one by EPA, two by the Lab.

Every time anybody's gone out there to take a sample, they have found plutonium above the level that can be attributed to global fallout, up to 1,000 times, in fact. So this may -- there are three hypotheses. This is maybe airborne. This may be related to some of the filter issues we're talking about on Building 332.

All of those things deserve a full EIS. And all of those things deserve to really, really be looked at seriously and some proposals put forward as to how to better safeguard the workers and the community.

3-21

Also, there have been plutonium criticality violations there regularly. As probably most of

3-21 cont.

you know, but I'll say it for the record, the Plutonium Facility was shut down because of a recommendation by the Defense Nuclear Facility Safety Board after there were 15 violations, when you guys were getting ready a subcritical test.

And then that shutdown really wasn't as complete as it was supposed to be. And there were an additional -- about ten criticality safety violations.

The facility was shut down. Then it was allowed to operate in a restart mode, which is a very limited, carefully controlled, supposedly, mode. And then last August there was another criticality violation even while it was in restart mode.

Again, this does not look like a facility that doesn't have problems. These things need to be analyzed in an EIS and not in a little book-report size Supplement Analysis that doesn't even talk about them and goes on to say, "We don't need to do an EIS."

3-22

There are a whole lot of programs at Livermore Lab that are new or have changed substantially since 1992. And I was one of the people who commented on the 1992 EIS. And, if

you'll remember, I'm one of the people who told you that even in 1992 your EIS was way behind the curve of coming events.

And the fact that the document was almost obsolete by the time the record and decision was signed in 1993 really doesn't sort of help things now that we're another six years down the road. It is incredibly obsolete.

You may recall there were just a couple of paragraphs about something called the NOVA upgrade. There wasn't even a National Ignition Facility that was being proposed.

The SSM/PEIS looked at siting and issues like that. It doesn't take the place of a site-wide. It needs to be considered. It will have an environmental footprint here at Livermore Lab and in our community.

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It will mean more tritium in our air. It will mean more waste. And what does that mean with -- given that we already have a burden of tritium -- that's radioactive hydrogen -- in our air from other Laboratory operations?

That's the kind of thing that only a site-wide EIS really looks at. And the cumulative effects of that has to be looked at now not

3-24

beginning maybe in 2002.

3-24 cont.

THE FACILITATOR: Under the assumption that there are other people, do you want to finish up and then come back? Because it looks like you've got some more there.

THE COMMENTOR: Right. Why don't I give you a short laundry list and perhaps come back?

THE FACILITATOR: Okay.

THE COMMENTOR: Other new programs are big changes in the Uranium Atomic Vapor Laser Isotope Separations. And let me -- well, let me just -- subcritical nuclear testing, the ADAPT program, which means that there's work going on right now on new ways to make plutonium pits in the Plutonium Facility, and also ASCI, the Accelerated Strategic Computing Initiative, may have a bigger environmental footprint than had been considered.

3-25

And the new building, the last time I spoke to DOE and the Lab, they were deciding whether or not they needed a whole new bank of cooling towers for it. And I've been promised a conceptual design report as soon as it's ready, and as soon as I look at it, I'll let you guys know if they are.

But all of these things are different; they have environmental impact, and they deserve to have

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a full environmental impact statement.

3-26 cont.

Thanks.

THE FACILITATOR: Thank you.

Is there anyone else who would like to speak? Yes, please.

THE COMMENTOR: Oh, hi. I'm Jackie Babasso. I'm Executive Director of the Western States Legal Foundation in Oakland.

And I would like to remind everybody here that the 1992 site-wide EIR/EIS was prepared as the result of a settlement negotiated by Western States on behalf of Tri-Valley CAREs with the University of California Regents. So we have a very long and deep interest in this issue.

We have done a partial review of the Draft Supplement Analysis, and we plan to submit written comments later. So I'm just going to make a few points now.

First, I want to start with a quote from the 1992 Livermore Lab Final EIR/EIS. And this quote was included despite many requests for the -- for review of possible re-configuration, facts that affects the re-configuration proposals on Lawrence Livermore as well as a variety of disarmament alternatives.

Here's what it said. Quote,

"Nevertheless, DOE is considering what activities necessary to support DOE's nuclear weapons mission should be carried out at Lawrence Livermore and Sandia National Laboratories, Livermore."

"The Secretary of Energy has proposed to re-configure the nuclear weapons complex to be smaller, less diverse, and more economical to operate. As part of this proposal, DOE is examining whether certain weapons research, development, and testing activities now taking place at the national laboratories should be consolidated."

"DOE is preparing a programmatic EIS on this re-configuration proposal. The re-configuration PEIS will address the long-term mission of Lawrence Livermore and Sandia National Labs in Livermore."

"This EIS/EIR addresses the

near-term continued operation of Lawrence Livermore and Sandia National Laboratories, Livermore. The focus of possible new long-term missions cannot be addressed until after completion of the re-configuration PEIS; therefore, identification and description of new missions for Lawrence Livermore and Sandia and analysis of associated environmental effects would be highly speculative and beyond the scope of this EIS/EIR." "However, this document is expected to facilitate the environmental assessment of future changes in missions or activities. Such changes would be reviewed against this EIS/EIR and further NEPA and/or CEQA review effect efforts undertaken if appropriate. This could include the preparation of a supplemental EIS/EIR."

End of quote.

3-27 So here we have the Livermore Lab 1992 EIS

telling us that it has to be re-evaluated after the re-configuration PEIS has been completed. Well, now re-configurations has come and gone and has been replaced by the Stockpile Stewardship and Management program, complete with a PEIS with an entirely new set of alternatives.

3-27 cont.

We believe that the Livermore site-wide EIS should be redone to reflect those changes. And in terms of thinking about those changes, I was reminded sitting here that the 1992 EIS was completed before a nuclear testing moratorium was in place, before the comprehensive test ban treaty was signed, before the President had committed the United States to the Stockpile Stewardship program.

3-28

And there have been very major changes in laboratory operations since then. These include the National Ignition Facility, as well as possible future NIF applications.

3-29

NIF was not in the 1992 EIS, and future possible applications need to be covered. Weapons effects testing, use of fissile materials if these applications are now foreseeable.

At the very least, we should know the existing state of planning and when decision points will be for these applications which could have

serious effects on the environmental impacts.

Now, I also want to remind you that disarmament alternatives remain highly relevant.

In 1996, four years after the 1992 EIS/EIR, the International Court of Justice, which is the highest court in the world on questions of international law, the judicial branch of the United Nations, unanimously found that there exists an obligation on the part of all states to conclude negotiations on the elimination of nuclear weapons.

That is the authoritative interpretation of Article VI of the Nuclear Nonproliferation Treaty which was extended indefinitely in 1995 due largely to very strenuous international efforts by the United States. Article VI requires the elimination

3-30 of nuclear weapons.

The International Court of Justice closed a loophole in Article VI by saying there exists an obligation on the part of all states to conclude

3-30 cont. negotiations, to finish the process, of nuclear disarmament. That alternative is not reflected in the 1992 EIS or in the Supplement Analysis.

Now, a couple of other specific points and questions that I'd like to raise. Plutonium in the park was mentioned. Western States Legal

Foundation, like Tri-Valley CAREs, participates in the ATSDR/CHDS site team, and so we also have a great deal of interest in that issue and some familiarity with it.

The new information that has emerged about the plutonium findings off site need more analysis. And this analysis needs to be combined with other

3-31 problems and changes in plutonium operations like the ones Marylia mentioned -- criticality violations, the ADAPT pit production program and so on.

This suggests to us the need to re-evaluate the purpose and need of plutonium operations at the

3-32 Lab, risks and alternatives of plutonium operations in a densely-populated suburban area which this area has become even more so since 1992.

On another point, in its response to the Western States' comments in the 1992 EIS, DOE also pushed off substantive discussion of waste management alternatives in the waste management PEIS which also is now complete. This information

3-33 needs to be integrated into a new site-wide EIS to inform the public, state regulators, local decision-makers, emergency services and so on.

3-34 Again, the whole NEPA approach in our view

has been like a shell game, just pushing off decisions, pushing off alternatives, pushing off analyses into different kinds of speculative PEISes and then never coming back to re-integrate them. (3-34 cont.)

Along these lines, as a result of the recent settlement in our lawsuit against DOE challenging the adequacy of the stockpile stewardship PEIS and the failure of DOE to prepare an environmental restoration PEIS, we have established a database which is going to include new information available for the first time at least to the public about waste -- waste streams including waste streams from defense programs.

So this new information will be coming out, will be available, and this is the time to inform the public about the cause and effect, the relationship between the waste streams and the programs at this Laboratory, possibly for the first time.

A couple of other specific points and questions. In the table 1-7, the line item regarding the Accelerated Strategic Computing Initiative, we know from looking at the ASCI program at Los Alamos that supra computing requires large amounts of water for cooling. (3-35)

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So we're wondering what the requirements are for Lawrence Livermore in the near future for the ASCI program, and this becomes immediately important because, for example, we just read in the paper yesterday that the Del Valle Reservoir will be drawing more water for the development in the near future. This is Zone 7, the water district. (3-35 cont.)

And given the tremendous demand for water in the Valley, you know, have -- there needs to be a thorough evaluation for the water demand for ASCI including its cumulative impact. And we don't see that in here.

Also, we wonder about the additional electrical power draw. Will there be new utility lines or power upgrades for ASCI? What will the cumulative impacts be? (3-36)

Regarding AVLIS -- and again, we're involved in a lawsuit trying to force environmental review of AVLIS, so we have a long-standing interest in that issue. And I have to say we have been able to get very little information about the status of this program.

This says that USEC is doing NEPA review of AVLIS. This is news to us. Does USEC do NEPA reviews? We'd like an answer to that question. We (3-37)

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don't think so.

In any event, for site-wide total impacts, AVLIS must be analyzed. And just because something will have project-specific review doesn't mean it can be omitted from NEPA analysis site-wide which would defeat the entire purpose of having site-wide EISes. And at the very least a cumulative impact has to be evaluated. (3-37 cont.)

How am I doing on time?

THE FACILITATOR: Over a little bit.

THE COMMENTOR: I'm over a little bit. I have just a couple more questions, but they're relatively quick.

THE FACILITATOR: Is there anyone else who is going to be at this podium to ask questions?

Go ahead.

THE COMMENTOR: Okay. So here's another question: Is the AVLIS pilot project up and running, and more generally, what is the status of the AVLIS program which has essentially gone underground since USEC took over? (3-37 cont.)

A couple -- another specific point, in table 1-8 regarding MOX fuels. It seems to us that the HEU and uranium numbers represent major increases. And we think that if this was a free-standing (3-38)

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issue, it would represent a very significant level. (3-38 cont.)

And we don't think there's adequate -- I mentioned about the waste streams and accident risks from the MOX fuels program. Similarly, we have questions about the tritium.

Building 331, Army Tritium Recycle, 30 gram limit, we haven't had a chance to check this, but we thought that the '92 EIS set a 5 gram limit. This also seems to represent a significant increase. And if it's not for that building, it should be used for -- as a standard of comparison. (3-39)

Almost finally, we read -- it was reported, I believe, in the "Albuquerque Journal" that the DOE was considering establishing a biohazard three facility at Lawrence Livermore National Laboratory.

This was certainly not analyzed in 1992. Is it true? Is it going to happen in the foreseeable future? Is it going to happen at some point in the future? That could have very significant environmental impacts. (3-40)

And finally, two related questions. Are there classified annexes to the 1992 site-wide EIS, and are there classified annexes to this Supplement Analysis? (3-41)

Thank you.

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THE FACILITATOR: Is there anyone in a position to answer any of those questions at the meeting?

MS. MARIK: I think the best thing to do -- because there is such an extensive list of comments, I would prefer to have the formal comments. If you'd like us to answer some of those questions right now, though, we'd be more than willing to do that.

THE COMMENTOR: Yeah. Any of them.

THE FACILITATOR: There's a question about the biohazard facilities.

MS. MARIK: The biohazard facility. In that circumstance, there are no plans to have a biohazard three facility at this site at this time. Should such a facility be determined to be necessary here, we would have to follow the NEPA process.

And, as you know, that's a DOE process. And until DOE decides that that facility is going to be placed at the Livermore site, it will not be placed at the Livermore site. And there are no plans to do that at this time.

THE FACILITATOR: You had two questions at the end.

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3-41 cont.

THE COMMENTOR: Have you talked about annexes?

MS. MARIK: No, there's not.

3-41 cont.

THE COMMENTOR: Have you talked about annexes in the 1992 site-wide?

MR. MARIK: No, there is not.

MR. ZAHN: Not that I know of.

THE FACILITATOR: Is there -- before you go any further, I just want to -- is there anybody else who has questions or comments along that?

Yes, sir? Please.

THE COMMENTOR: I assume this is an official, approved thing I just picked up out here.

MS. MARIK: The fact sheets?

THE FACILITATOR: What is it?

MS. MARIK: Is it the fact sheets?

THE COMMENTOR: No. It's just an article; promotes your stuff.

MS. MARIK: Okay.

THE COMMENTOR: Andrea.

MS. MARIK: Widener.

THE COMMENTOR: Something.

Now, I doubt that she makes these things up, so someone had to tell her this. I doubt that she knows enough -- if you're present, excuse me.

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MR. TAYLOR: She may be here.

THE COMMENTOR: I just doubt that you know enough to do a civilized calculation in a specific activity.

But let me take up what you put down. It was handed out out here. Some 6,000 pounds of depleted uranium which has less than 1 percent radioactive material.

Now, do you agree with that?

MS. MARIK: No. We were -- I think that she's referring to uranium 235 content of that material.

THE COMMENTOR: Depleted uranium is all radioactive.

MS. MARIK: Yes, it is. But --

THE COMMENTOR: Okay. Now that thought said here.

Now next, in case you misunderstood, about -- it was a statement requiring a statement of rate. Now, in case you misunderstood, it's still not a factor of 100 difference. If you look up the half lives, I doubt that they're a factor of 100 difference.

3-42

And that's the only factor that occurs in a specific activity calculation. And the specific

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3-42 cont.

activity, I doubt, is 100 times different between those two isotopes.

MS. MARIK: I'm sorry. I'm missing -- I'm missing the question.

THE COMMENTOR: I'm sure he didn't; some of these other people didn't. You talk to them.

MS. MARIK: Uh-huh.

THE COMMENTOR: So that's a misinformation or misleading thing.

Now, that's somewhat better than the fact that they've been -- the newspaper people have been told that depleted uranium is non-radioactive which has occurred on two separate occasions. I hope the newspaper people here learn to get the statements and use them as a quotation when they're told those dumb things.

3-42 cont.

THE FACILITATOR: Would you give us your name and also the citation for that article?

THE COMMENTOR: You've got it out there.

THE FACILITATOR: I know. I want to get it for the stenographer.

THE COMMENTOR: Oh, okay. It's not her fault.

THE FACILITATOR: I understand. I just want to make sure for the record it's down.

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THE COMMENTOR: All right.

If they give you these things and you doubt it -- you should be careful about things that PR people tell you. I will show you the calculations.

Let me go to one more thing.

THE FACILITATOR: Okay. Forget it.

THE COMMENTOR: The filters in the plutonium building were over-aged when I retired 15 years ago. Now, I know that they have probably all lost at least half of their potential strength, and their hydrophobic ability is -- starts severely downhill after five years. 3-43

Now, all these things the internal filter people know. And we've got some of the best filter people in the world here and in Los Alamos. You should talk to them; see what should be done with that damn plutonium building which is a risk to the public. And I'm a part of the public because I live right over here.

Those filters are a serious threat to this community. And you pump 13 -- 10 to 15 inches of water pressure through those things. I'll bet you they won't stand the cyclone test that they're supposed to take right now. 3-44

If you don't know what that means, you talk

to the filter people here. You've got some good filter people here who are knowledgeable; some of the best in the world. And if they won't talk to you, talk to the people in Los Alamos so they won't get fired here or put in a dark room with no windows.

I'm not kidding; I'm serious.

MS. MARIK: I understand.

THE COMMENTOR: Because this is to your discredit to allow these things to continue.

MR. TAYLOR: We'll definitely include a response to the filter issue in our comment response document.

THE COMMENTOR: I don't know whether they're right or not. I talk to people about it, and nothing ever happens.

MR. TAYLOR: I think we have enough with Marylia. It will definitely be included.

MS. MARIK: We'll be responding.

THE COMMENTOR: Okay. Good.

THE FACILITATOR: Is there any other questions before we go on?

PREVIOUS COMMENTOR: Give them your name now. For the stenographer, they need to know your name.

THE COMMENTOR: I'm sorry?

PREVIOUS COMMENTOR: There's a stenographer who wants your name.

THE COMMENTOR: Oh. I'm Marion Falk. Sorry. M.M. Falk is the best way to put it down.

THE FACILITATOR: Take a time out.

(Pause for the reporter.)

THE COMMENTOR: I have a question that I didn't get to. As I'm looking at the administrative limit here of projected change to 500 kilograms of highly-enriched uranium and I'm remembering -- and I'm doing this by memory, but I'm pretty sure that when Secretary O'Leary did the declassification initiative, that allowed for the public to know how much plutonium and uranium -- highly-enriched uranium were here at that time, which was only a few years ago and it's still the most recent numbers we have. It was 880 pounds of plutonium and 440 pounds of highly-enriched uranium.

So if I'm doing my math right, you're talking about going from 440 pounds of highly-enriched uranium to 1,100 pounds of highly-enriched uranium. 3-45

Now, under the National Environmental Policy

Act, don't you think that's a significant change? 3-45 cont.

MS. MARIK: Well, part of the answer to that is that we're dealing with administrative limits, and so what we were talking about in that particular circumstance is that the -- the amount of material that can come into the building is going to increase, but the amount of material that we actually have operations being performed out of -- at any single time is not going to increase.

So what we are saying is that although we have increased the administrative limits on the building, the actual material that will be at risk at any one time is going to remain the same.

THE COMMENTOR: Well, two things. One is: I think you're using the word "administrative limit" to be the same thing as the amount of uranium on hand site-wide. 3-46

MS. MARIK: Yes.

THE COMMENTOR: Okay.

MS. MARIK: Within that particular building, yes.

THE COMMENTOR: So the amount of uranium on hand may, under this, be increasing more than 100 percent -- way more. 3-46 cont.

MR. TAYLOR: Uh-uh.

MS. MARIK: For that particular building. It's going from 300 kilograms to 500 kilograms enriched.

Now if -- but if you take into account the depleted and the natural, yeah, we are increasing it. But originally the 300 kilogram number was all types. So it was enriched, depleted, and the natural.

THE COMMENTOR: My point is that at a point -- at a particular point in time only a couple years ago -- and if you guys want to jump up and say that the Department of Energy was wrong, you know, then set me straight.

The Department of Energy said there were 440 pounds of highly-enriched uranium at Lawrence Livermore National Laboratory. And that's a set number. Okay. Now we're talking about we want to have 1,100 pounds of highly-enriched uranium at Lawrence Livermore National Laboratory.

3-46 cont.

And I understand you're talking about, "Well, we won't play with more of it at one place at one time." But nonetheless, when you do hazards analysis, oftentimes you look at the total amount that you have on hand. And that's going to more than double.

I think that requires, particularly in light of all the other changes we've talked about, a significant analysis which is beyond what's contained in that.

3-46 cont.

MR. TAYLOR: You know, I don't think we know the answer -- that's very possible. We could have -- at one specific time in history, we could have had 440 pounds --

MS. MARIK: Of enriched.

MR. TAYLOR: -- at that specific time, but it has varied.

THE COMMENTOR: Well, you have the date exactly.

MR. TAYLOR: I don't know that we can give that answer.

THE COMMENTOR: I have a question on environmental justice. I know that since 1992, the presidential directive on environmental justice came forward with this issue. And my question has to do with Site 300 and the nearby town of Tracy because I know that since we have tag grounds and we have tag meetings of clean up of those same type, we're kept up to speed on pretty much, as I guess we can be, on some of the ongoing problems out at Site 300.

3-47

And what's on my mind right now is the two-mile long tritium plume headed toward the boundary. And I'm thinking that there was no analysis of -- in the 1992 EIS/EIR and certainly not in any depth here about the relationship of the tritium contamination problems which are on the rise there because of the increased amount of tritium that's been released to the groundwater because of the problems with the rising of the groundwater levels during the high -- you know, heavy rainfall seasons and then receding back down and then heading it -- taking it with it to the groundwater. And obviously this threatens the aperture below. And that could be a major problem in addition to plume.

3-47 cont.

So I was hoping to see somewhere mentioned of the relationship of that problem to the people in Tracy because the populations closest to it are basically Spanish-speaking people who do not speak English.

They do not know -- I can guarantee that they don't know any of this information. They don't get anything in English or Spanish that are directed to them as a community.

3-48

And I do feel that there's an environmental

3-47 cont.

justice issue, if not in fact, potentially there. So, I mean, it was not addressed here, and I think that in terms of Site 300 it needs to certainly be addressed. It's a very serious problem.

There probably are other ways that I could describe the environmental justice issues in terms of the safety between 1992 and now. The increased population around the Main Site as well, and that includes some of the lowest housing areas, in terms of income-related people. That is also something that also should be addressed since the 1992 EIS/EIR.

3-47 cont.

And I do think that both of these things merit a full-out review, not just a supplemental analysis or a supplement to an EIS but an actual new one.

Some of them are new issues -- are old issues that have never been addressed, and some of them should be re-addressed.

THE FACILITATOR: You started off saying it was a question; it seemed like a comment. Do you still want an answer on your --

THE COMMENTOR: I want an answer whether or not they would intend to -- based on my question now, to do something and do some kind of

3-47 cont.

3-47 cont.

environmental justice review that's worthy of the name.

MS. MARIK: Mike, would you like to address that?

MR. LAZARO: All I can say about the environmental justice chapter that's included in here is that we tried to look at something similar to what was done in the Stockpile Stewardship and Management program in drawing these circles of low-income populations in 20- to 50-kilometer radiuses of the Site, and then looking at environmental justice for various pockets of minorities and low-income people that might be associated with the routine releases from the Lab site.

In examining that and in looking back at what we've done in the Stockpile Stewardship and Management program, we really couldn't say that there was any projected impacts from -- from the proposed action for these new projects and for part of the programs at the Livermore site since 1992 that would adversely impact these minority populations.

3-47 cont.

THE COMMENTOR: How about Site 300?

MR. LAZARO: Site 300 was --

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MS. MARIK: It looks like it's a good point, and we'll have to --

3-47 cont.

THE COMMENTOR: My question is: Can I expect to see some good analysis done?

MS. MARIK: Yes, we will address it.

THE COMMENTOR: And I would add one thing about the Main Site, since you come from Argonne. As you go down East Avenue, the very closest neighbor to the Lab is a new apartment complex; it's red and yellow. It's a low-income complex.

3-47 cont.

And the complex next door to it has a high proportion of low-income including some Section 8.

MR. LAZARO: That's right down East Avenue?

THE COMMENTOR: Yeah. The first two. The first two you come to are -- one is a HUD, I think it is, Housing and Urban Development, and the other one is not. But I think it has a high proportion of low-income and Section 8.

3-47 cont.

So we're not talking about the 20- and 40-kilometer; we're talking about the nearest neighbors.

MR. LAZARO: Thank you for that.

THE FACILITATOR: Yes, ma'am?

THE COMMENTOR: I have a question. In the Draft Supplement Analysis it mentioned the species

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3-49 cont.

of special concern like white -- a pair of nesting white-tailed kites were observed.

I was wondering: Where were they observed, and what -- it says, "Mitigation measures will be implemented" -- what those mitigation measures are? Can you identify them?

MS. MARIK: We've actually had successful nestings on-site.

And, Ken, would you like to expand on that?

MR. ZAHN: Yes, I would like to address that.

The white-tailed kite is not a federally-protected species that is threatened or endangered. It is a protected species. And we have been watching for raptors here at the site, as most wildlife biologists are prone to do.

And we have -- about four years ago began picking up sightings of the white-tailed kite. And each year we seem to be increasing in the number of white-tailed kites who have chosen the Livermore site for their primary nesting site.

First year, we had one pair, and they nested in the eucalyptus tree right here at the main intersection which is outside this trailer building. Last -- and that has increased each

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year; sometimes double nestings.

And last year we had four completely successful nesting pairs and two follow-on nest sites, one right here behind this trailer, right at the base of the stoplight, if you can imagine that. For some reason they seem to prefer the Livermore site peripheral area's pine trees.

And what we do there, since we are seeing these birds pop up now at the Main Site, is we develop each year -- as soon as we can understand where they're going to nest and they start nesting activity, we actually build separate exclusion areas or restriction zones around those trees with precautions to certain clients that we know will be operating in those areas.

And we coordinate that with Fish and Wildlife Service and let the clients know, and we follow them during their entire life cycle to fledgling and independence so we can keep track of how it's going.

So this is actually a success story. In a sense we're actually trying to watch for them to study them. And even though they're not federally protected under the Endangered Species Act, just in the interest of improving the potential for their

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continued recovery, we're supporting that here on site.

THE COMMENTOR: I may have forgotten in my little diatribe against the filters that I am in favor of a new environmental review. So this -- new, open, and total review again so that you've got to talk to your filter experts and get it aboveboard. 3-50

As a matter of fact, I checked with some classified that there are only two filters in series in that building. It's been that way for many years. Only two HEPA filters in series. That's the lowest number in any part of the Department of Energy complex. 3-50 cont.

Two filters. That's just enough to get the orientation of the translucent spot fixed up to go through the second one. Now, if you don't know what I'm talking about talk to your filter people.

Now, he's laughing. But I bet he knows. This is the point. I think it should be brought -- told to the people what the threat is in those filters in that plutonium building, especially if you're going to up the metal material. 3-50 cont.

Is it going to be metal, or is it going to be metal off site, these new additions?

MR. TAYLOR: We can address that.

THE COMMENTOR: Huh?

MR. TAYLOR: We can address that.

THE COMMENTOR: What is it? Can you tell me?

MR. TAYLOR: No. I don't know.

THE COMMENTOR: Well, it makes a difference.

Also, if they get around to having that new committee re-can them, then that scares me again, like the re-can of the plutonium that will start to blow up. 3-51

THE FACILITATOR: Ma'am?

THE COMMENTOR: Yeah. I had asked a question that wasn't answered about AVLIS. Can you tell me if the AVLIS pilot is up and running or anything else about the status of the AVLIS program? 3-52

MR. ZAHN: I might be able to respond partially to that. I'm not an AVLIS program representative. I'll tell you what I know or what I think I know about that.

You did ask a question about a NEPA documentation for the follow-on to the AVLIS project that was outlined in 1990 EA on AVLIS activities.

The follow-on IPD project had -- did go underway, and it began after an EA was prepared. The EA was, in fact, prepared by USEC. And in that particular case the USEC was a quasi-governmental agency which had its own NEPA guidelines. And I don't know whether there were guidelines or regulations, but they did have their own NEPA process.

DUE and USEC came to an agreement as to which agency would provide documentation of that project, and USEC was given -- given proponency for NEPA review for that follow-up project.

So there was an EA --

THE COMMENTOR: When was that?

MR. ZAHN: This is a guess on my part. Probably 1993, perhaps 1994.

It is -- but it is a federal EA under NEPA, so it's available. There was a funding issued by USEC. And as far as I know, that project is underway and is covered by that USEC environmental assessment.

THE COMMENTOR: We have a letter just about that same year that says, "We don't need to do that."

PREVIOUS COMMENTOR: You represented to us

over and over and over again orally and in writing that they did not have to comply with NEPA and that they weren't doing --

THE COMMENTOR: Is this an unclassified EA?

MR. ZAHN: Yes, it is.

And I believe -- again, I can't speak to USEC's process, per se, but that's my understanding of it. And again, I'm guessing on the date. So I can't tell you whether or not that's correlatable with your letter from USEC.

But USEC did have a NEPA process, and did with DUE -- through an agreement DUE -- I'm sorry -- USEC did provide the environment assessment for that work.

And I don't know, again, whether or not that -- the project that you have in mind characterized by your -- your topical title for it is exactly the same as in the EA, but I certainly would invite you to see if you can get a copy of the EA. You'd be able to compare what you think the project was and what's in there.

THE COMMENTOR: Well, actually, just to follow on, because I was going to ask for a copy of that, and there were a couple of other things that were mentioned that I would like to get a copy of

to help do an analysis.

MR. ZAHN: I wouldn't be able to provide you a copy of the USEC EA, but there may be an opportunity either through DUE or through one of the programs it can be made available.

THE COMMENTOR: One of the reasons that we're appealing to you is because that's not always a timely process, and you have a short comment period.

MR. ZAHN: That's true.

THE COMMENTOR: If you could get me the 1995 Safety Analysis Report for Building 332? And I do have the unclassified version -- the declassified version of the older one, but I do not have the 1995 one. And also the 1998 Updated Safety Analysis Report for Building 331?

And my point in saying that I had the earlier declassified one is if it's classified, declassify it.

MS. MARIK: It has to go through that process.

THE COMMENTOR: I'd just like to make a comment about this surprising news of this EA prepared by USEC.

Whenever we had asked the Laboratory, right

up to Ted Garberson, the head of Public Affairs, for updated information on AVLIS, we have been -- after months of waiting around, we have gotten things like the 1990 EA in response.

3-53

And we've tried to track this down both through USEC and through the Lab numerous times. So this is actually very surprising information, and I don't know exactly who to be asking for assistance at this point, but that's just not acceptable.

MR. ZAHN: Okay. I will say on the Laboratory's behalf that although I'm involved in the Laboratory's assistance to DUE in its NEPA mission, I hadn't received a request, but I wouldn't -- I -- in any case, I'm sure there is one.

THE COMMENTOR: Just imagine being given a runaround. Just imagine that you're us and that we've sent a letter asking, "Is there anything new that happened," and what you eventually get back months later is the 1990 EA that your organization sued over so that they know that they're giving you something you had.

MR. ZAHN: I can't tell you again the time correlation, but I -- but I have seen the EA. I

was not involved nor was the Lab involved in any way. It's public --

THE COMMENTOR: We'll take it. Thank you.

MR. ZAHN: But I'm sure there is one. I'm confident that there is one.

THE COMMENTOR: Could I get one of those reports so I don't have to go to the library and work on it?

MR. ZAHN: Which is that?

MR. TAYLOR: Would you grab one out of that box, please?

THE COMMENTOR: Just going to the library and sitting in those uncomfortable chairs. I want to read what I want to read not what somebody else --

THE FACILITATOR: Anybody else?

THE COMMENTOR: I'll take an extra if you have it. Give everybody else first because I have one.

MR. ZAHN: I might interject also for you that the follow-on -- I don't know the extent to which the follow-on program, the pilot program that you may be speaking of, as far as what was actually being followed on.

And I would just encourage you once you get

the EA to compare that with what is being proposed there with what your concept of the follow-on is because I'm not sure that they might be exactly the same.

The follow-on, larger-scale programs may not, in fact, be going on or be assessable or assessed. So what level of activity after the AVLIS of the 1990 has been done, I believe has been covered by Assembly A.

THE COMMENTOR: Okay. But I don't want to

3-54

lose the point that the cumulative impacts for the site need to be addressed.

THE FACILITATOR: Okay. Anybody else?

Well, thank you all. I appreciate it. Thank you, too.

THE COMMENTOR: Excuse me. I'm sorry.

THE FACILITATOR: Sure.

THE COMMENTOR: Since I'm not going to get up to speak, I would like to hear some more of Marylia Kelley, what she -- it seemed to me that she didn't quite get out what she wanted. I was wondering if I could donate my time so that she could speak?

THE FACILITATOR: Do you have more that you'd like to say?

PREVIOUS COMMENTOR: That's fine.

THE COMMENTOR: I thought she was on a roll.

THE FACILITATOR: She was on a roll.

MS. MARIK: Come on up.

THE COMMENTOR: And it seemed to me she had a lot more to say, and I would really like to hear it.

MS. MARIK: You're more than welcome to come up, Marylia.

3-55 THE COMMENTOR: Well, basically what I was sort of wrapping up with are the fact that all of these programs -- the Accelerated Strategic Computing Initiative, we know may be, as was briefly mentioned, a huge user of water at the same time -- and that wasn't conceived of in 1992 -- at the same time the National Ignition Facility is slated to be a huge user of water, and that wasn't conceived of in 1992.

At the same time, there is new contamination in the groundwater that has been discovered since 1992, and other contamination in these areas that, in fact, the construction of these facilities could have an impact on.

And all of these related impacts individually and cumulatively -- meaning looking at

them all together and how each one affects the

3-55 cont. other -- hasn't happened. And you have really a whole different -- in some ways, a whole different site here than you had in 1992.

Subcritical nuclear tests may, in fact, involve operations in the Plutonium Facility that may be different than some of the prior operations.

3-56 I mean, certainly I doubt if they would use more plutonium; they probably use less. But when you're looking at issues like dust and how much lathe work is done and that kind of thing, it brings up some questions which this document doesn't answer and some document should.

When you're talking about AVLIS that has been mentioned. I know "Newsline" has talked about hundred-hour runs where you're using -- basically a system where you use toxic-size lasers and copper lasers to enrich uranium.

3-57 And the EA -- the 1990 EA talked about putting a gram of uranium annually into our air in finely divided particles, 13 tons of freon and an undisclosed but large amount of TCE.

3-58 And so, you know, how many hundred-hour runs are run, what the impacts are, what the proposals are, whether those were integrated-pod runs, you

know, how much uranium.

3-58 cont. All of those kinds of things need to be analyzed, and these are all new since 1992.

And the National Ignition Facility, again,

3-59 is going to add tritium, other radioactive wastes, other contaminants, even during routine operations. And that needs to be looked at carefully with respect to other Lab operations, not just sort of on its own, the way that it's been analyzed before.

Livermore Valley wines, according to the Livermore Lab's annual environmental monitoring

3-60 reports, routinely show elevated levels of tritium. And these are Livermore Valley wines that the Lab takes off the shelf in the supermarket.

So this may certainly be less tritium than the grapes right across the street where I live on East Avenue because, you know, you mix grapes together when you make wine.

3-60 cont. And in 1989 Livermore Valley wines taken off the shelf had four times the tritium of other California wines. It's not like a 10 percent kind of an increase.

And we've taken a look at the DOE's own figures. We have a DOE document where they look at

3-60 cont. the annual releases that they know about from

Livermore Lab for tritium, for the radioactive hydrogen, and you can take that document and you can correlate it directly with how much tritium is on site and being used.

There's a direct correlation between the amount of tritium being released in a year and the

3-60 cont. operations that go on at the Lab, so that the more tritium is used at the Lab the more gets into the environment because it's gaseous; it becomes tritiated water so quickly; it diffuses through everything that exists just about, and it's just flat true that you cannot contain it and control it here.

So when the National Ignition Facility gets going, there's going to be incrementally some additional tritium. And that should be looked at.

And as Jackie alluded to, there are proposals, very serious proposals that we have with DOE logos on them and what was then the Defense Nuclear Agency logos on them and Livermore Lab logos on these reports which we'll be happy to

3-61 share which say that they may use fissile and fissionable materials in the National Ignition Facility.

Plutonium 239, uranium, and, in fact, the

3-61 cont.

Lab has come forward and said, "Yes, we at least plan to use uranium 238," but potentially uranium 235, if they make that decision, and also lithium hydride -- large amounts potentially of lithium hydride.

And while a final decision hasn't been made, under NEPA in terms of site-wide analysis, is it a plan -- is it a proposal that might happen in the foreseeable future?

And, as Jackie said, if that question isn't answered in an EIS, it should at least lay out a time frame for when that question is going to be answered and what those impacts might be.

3-62

So we're looking at huge new facilities that didn't exist before -- and different kinds of operations that didn't exist before that could have a very substantial impact on the environment. Everything from water, which is at a premium here, to exotic contaminants like plutonium.

This document just -- just ain't enough.

MR. ZAHN: We'd like to respond on the water if we can, please.

3-63

THE COMMENTOR: Now, if you don't know the stuff is metal oxide, those two things make a big difference about the threat. So you should find

3-63 cont.

that out.

And it should be in the report because this business of always saying that the risk is only one in a million, that's oil on the water for public consumption and misleading because everything seems to be a one in a million risk that comes from this place. I think somehow there's a hard-wired key that's punched that they tell the newspaper people that number.

Now, in addition, the formal structure of that slope factor should be included with all the assumption that goes into the slope factor that you tell the people in these reports it applies to. Not just tell them that the Earth is only 50 percent flat. You can't do that in all honesty. You've got to tell them it's either flat or some other thing and give the structure because more and more people can read mathematics.

They don't have to be told the Earth is flat and expect them to believe it anymore. I don't. And even if it comes from the right hand of God, someone tells me, "The Earth is flat," I have reason to be suspicious. Even when they tell me it's round, I have reason to be suspicious.

So, please, support these absurd statements.

If they're not absurd, don't be afraid of them.

MS. MARIK: Thank you.

THE FACILITATOR: Anyone else?

Well, thank you very much. I appreciate it. I'll just remind you there is a comment form, if you want to grab one of these on the table before you leave.

I wish to thank you everybody, including the stenographer reporting and the people over here. Thank you very much.

There's a meeting again at 6:00 tonight if any of you would like to return.

(Whereupon, the briefing proceedings concluded at 3:32 p.m.)

STATE OF CALIFORNIA)
) ss.
)

I, LETICIA A. RALLS, a Certified Shorthand Reporter in and for the State of California, do hereby certify:

That said proceedings were reported by me at said time and place, and were taken down in shorthand by me to the best of my ability, and were thereafter transcribed into typewriting, and that the foregoing transcript constitutes a full, true and correct report of comment and question portion of the proceedings which took place.

I further certify that I am not of counsel nor attorney for either or any of the parties hereto, nor in any way interested in the outcome of the said briefing.

IN WITNESS WHEREOF, I have hereunder subscribed by hand this 15th day of February 1999.

LETICIA A. RALLS, RPR
CSR. NO. 10070

3.5 Document 4: Briefing Transcript, Livermore, February 11, 1999, 6:00 p.m.

TRANSCRIPT OF COMMENT AND QUESTION PORTION

OF PUBLIC BRIEFING

Regarding:

DRAFT SUPPLEMENT ANALYSIS
FOR

CONTINUED OPERATION OF
LAWRENCE LIVERMORE NATIONAL LABORATORY AND
SANDIA NATIONAL LABORATORIES, LIVERMORE

Proceedings before: BARRY LAWSON, Facilitator

Thursday, February 11, 1999

6:00 p.m. session

Taken by LETICIA A. RALLS,
a Certified Shorthand Reporter,
in and for the State of California
CSR No. 10070

PROCEEDINGS

BE IT REMEMBERED, on Thursday, the 11th day of February 1999, commencing at the hour of 6:01 p.m. of said day, at the LAWRENCE LIVERMORE NATIONAL LABORATORY, EAST GATE VISITOR CENTER, Trailer No. 6525, Greenville Road, Livermore, California, before me, LETICIA A. RALLS, a Certified Shorthand Reporter in the State of California, the said briefing proceedings were had.

APPEARANCES

BARRY LAWSON, of BARRY LAWSON ASSOCIATES, Mountain Road, P.O. Box 26, Peacham, Vermont 05862, appeared as the Facilitator.

LOIS MARIK, of the DEPARTMENT OF ENERGY, Deputy Director for Livermore Operations Division, appeared as the presenter and as a panel member.

CHUCK TAYLOR, of PAI CORPORATION, appeared as a panel member.

MICHAEL LAZARO, of ARGONNE NATIONAL LABORATORY, Chicago, Illinois, appeared as a panel member.

APPEARANCES (continued)

KENNETH ZAHN, Group Leader, Environmental Evaluations Group of LAWRENCE LIVERMORE NATIONAL LABORATORY, appeared as a panel member.

HANK KAHN and BRUCE CAMPBELL of LAWRENCE LIVERMORE NATIONAL LABORATORY, appeared as notetakers.

LIBBY STULL of ARGONNE NATIONAL LABORATORY, appeared as a notetaker.

---oOo---

(Whereupon, subsequent to Ms. Marik's presentation, the following comment and question period began at 6:17 p.m.)

PROCEEDINGS

THE FACILITATOR: Thanks.

Now, let's start our comment period.

I invite you to go one at a time for an initial period of a maximum of about five minutes either asking questions or making comments regarding the Supplement Analysis.

Please introduce yourself and affiliation, if you'd like, and indicate before you start whether you're asking a question or making a comment. That will help our notetakers.

If you're closing in on the five-minute mark, I will request that you conclude your comments as gracefully and graciously as possible. Remember, you'll have a chance to supplement those later in the evening.

Oh, yes. If you have some written comments that you would like to leave with us, you're certainly welcome to do it, and you don't have to feel that you have to read the whole thing to which you can summarize the oral comments and submit the written ones for the record. Written and oral comments will receive the same attention.

So is there anybody who here would like to ask a question or make some comments?

All right. Good night.

Yes, sir? Please, Mr. Falk.

THE COMMENTOR: What is Building 490 complex?

MS. MARIK: The U-AVLIS complex.

4-1 THE COMMENTOR: Why do you need the ability to handle 80 tons of uranium?

MS. MARIK: That's in the 1992 EIS. Those conditions have not changed.

4-1 cont. THE COMMENTOR: Why do you need the ability for 80 tons? I didn't read that thing, so I can't tell you, or I can't answer that -- I mean, I didn't read it.

MR. TAYLOR: What they're doing in there is separating uranium --

4-1 cont. THE COMMENTOR: I know. But 80 tons?

MR. TAYLOR: Well, that was the programmatic evaluation of the amount of material they needed, and that's what we evaluated in 1992 for that facility.

4-2 THE COMMENTOR: Okay. And then in some of the other questions you were talking about three tons. I thought this was a research facility not a

5

4-2 cont. storage depot.

MS. MARIK: Three tons or --

THE COMMENTOR: I always had the impression this was mainly a research laboratory, and still

4-2 cont. do. So, therefore, I'd like -- how come such a mammoth amount? Is someone getting rid of it, and you need to store it here or what?

MS. MARIK: Well, it's to support your programmatic activities. And within the plutonium --

4-2 cont. THE COMMENTOR: Can you tell me what programmatic activity needs that much?

MS. MARIK: Yes. Within Section 6 of the document we talk about the programs that -- that will be -- that are currently or planned for the future. And the largest -- the largest project --

THE COMMENTOR: I just got that document.

MS. MARIK: -- is the MOX. And what that is is a -- I'm drawing a blank -- it's a -- I'm drawing a blank. I went blank. It's a prototype for a fuel rod.

THE COMMENTOR: Yeah?

THE FACILITATOR: Is that still within the research question?

THE COMMENTOR: Can you say any more?

6

MS. MARIK: Do you want to expand on it?

MR. TAYLOR: Do I want to expand? The programs are identified on page 6-5. We can get you a copy.

THE COMMENTOR: I just got it. I haven't read that yet.

MR. TAYLOR: We went through and indicated each of the programs that we're going to conduct activities in there and why we need to expand the uranium. So we've provided that.

We can provide a detailed -- a more detailed explanation of those programs if you wish to make that comment.

MR. LAZARO: I think what he's looking for specifically is why do we need 40 tons -- it's really 40 tons of uranium in Building 490? Why such a large amount?

I think we'll give you a specific response to that. What the programs need to require the 40 tons of uranium in Building 490? Is that essentially --

THE COMMENTOR: Yeah, that will do.

MR. LAZARO: -- the question that you have?

THE COMMENTOR: Yeah.

THE FACILITATOR: Somebody else?

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Yes, sir? Please.

4-3 THE COMMENTOR: Why here? Why Livermore? Why not -- for a fuel rod, why not Brookhaven? Why not down in New Mexico or Los Alamos?

MS. MARIK: Well, there are three national laboratories that the President has mandated do weapons research, and those laboratories include Sandia and Livermore and Los Alamos.

THE COMMENTOR: There aren't many fuel rods and bombs.

THE FACILITATOR: Sir, would you give your name, please? Sir?

THE COMMENTOR: Ernest Terrier. I'm a resident here in Livermore.

And it concerns me that any risk, whether -- I mean, just glancing at this briefly --

4-4 that's all I've had a chance to do -- the risk seems minor.

I've had worked for nuclear facilities with the aircraft carrier. I'm familiar with the risks involved in a nuclear environment. And as far as I'm concerned, any risk is too great, and that

4-4 cont. concerns me greatly.

And it worries me that an accident will happen beyond the scope of planning and

8

4-4 cont.

expectations. And it worries me that we're doing it here, in the Bay Area. And why not somewhere quite a bit removed and safer? Is there -- is it because the people are here? What is the reason?

MS. MARIK: It's the mission of the Laboratory. It's the mission of the research laboratories that they -- the weapons laboratories are those three laboratories. They're Sandia, Los Alamos, and Lawrence Livermore.

4-5

THE COMMENTOR: Then my next question is: Why can't the theoretical research be done here? That's what I've always heard was done here, not the practical research. Carrying large amounts of materials here is not what everybody is led to believe who lives in the area, unless you work here in the labs.

MR. TAYLOR: Maybe I can respond to that issue.

One of the issues that -- that is very difficult for us to respond to here is what is mandated by Congress when funds are appropriated to the Livermore Laboratory.

Congress tells the Livermore Laboratory within certain areas what activities are to be conducted here. And we at this -- at the local

level don't really have control over that; we're pretty much mandated by Congress of what programs we do.

So what we're trying to evaluate is what Congress and the President have told us to do here.

4-6

THE COMMENTOR: And what say does the public have in all of that?

MR. TAYLOR: Well, that's the purpose of this.

4-6 cont.

THE COMMENTOR: So what is the recourse to -- I don't want to say "stop it" because obviously it's a very valuable thing and that's not my intention, but to -- what recourse do we have as residents of Livermore, I guess is the best --

MR. TAYLOR: I don't know if I want to say that, but the -- yeah. I guess, just to be blunt, the outcome of this process, we go through this process and it's signed; the document is signed.

And then the public's recourse, if they're not happy with that, is to bring suit against the Department of Energy. I mean, I don't like saying that, but that's --

THE COMMENTOR: You're a candidate.

THE FACILITATOR: But you do have a couple of other options. One is you can talk to Congress.

The second is that, by making your comment or asking a particular question -- for instance, if you wanted to ask the question, "Why doesn't this take place at Los Alamos," somebody will have to answer that question. It may not be the right answer that you want, but they probably will give you an answer in writing.

THE COMMENTOR: I also understand that Los Alamos is about as big as Livermore, and they would have the same complaints that we have here.

THE FACILITATOR: Right.

4-7

THE COMMENTOR: It's just moving it from us to them. I don't consider that fair, but it seems like there's some wonderful places in the middle of nowhere that this could be done and not bothering anyone. And that concerns me.

THE FACILITATOR: Thank you for your comment.

Anyone else care to go? Yes, sir.

THE COMMENTOR: Yes. I related to the same questions that were just coming along in there. Part of my question would be: When he asked, "why here," is part of the answer "why here" because -- and I'll break it apart for a moment here.

I remember during the Star Wars history a

few years back that a good deal of the "why here" answer was because it was very heavily advocated by Mr. Teller.

4-8

Is the reason "why here" with regard to these questions because either Mr. Teller or other people here are strongly lobbying for that activity here?

And -- well, then I'll go on with the second part after I get an answer. But is the answer that the Laboratory and other people here have lobbied for here? Can we get an answer?

THE FACILITATOR: Anybody want to be on record to saying that?

MR. TAYLOR: First of all, I think it's illegal for the Laboratory to lobby Congress as well as DUEs. I can just say that.

Beyond that, I don't know what....

THE COMMENTOR: So when Teller was talking to Congress about the Star Wars, it was illegal? Is that right?

MR. TAYLOR: If he is invited by Congress --

THE COMMENTOR: It may be illegal -- excuse me. Lynn Haus, Livermore Police Report.

It may be illegal for you to spend government money to lobby Congress. It's not

illegal for you to write letters and talk on the telephone.

MR. TAYLOR: To inform Congress when they request.

THE COMMENTOR: Lobbying and -- the money part is what makes it illegal.

I'm sorry. I didn't mean to interrupt you.

PREVIOUS COMMENTOR: That's quite all right.

THE FACILITATOR: May I ask you for your name?

THE COMMENTOR: My name? Rene, R-e-n-e, Steinhauer, S-t-e-i-n-h-a-u-e-r.

THE FACILITATOR: Do you want to continue?

THE COMMENTOR: Yes. Well, I was questioning them about this because then what you're saying is that the resolution to this thing, if we wanted to change it, is then for us as citizens to lobby Congress directly against this ongoing procedure here.

4-9

THE FACILITATOR: That's one --

MR. TAYLOR: That's right.

THE FACILITATOR: That's one road that you could take.

MR. TAYLOR: Your representatives represent you and....

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THE FACILITATOR: Yes, sir?

THE COMMENTOR: Again, Lynn Haus from Police Report in Livermore.

I would like to call on and question the math of the gentleman here in the middle of the table.

I believe he said the number here is 40 tons, correcting the gentleman over there who said it was greater than that. Now, I happen to know that a kilogram is 2.2 pounds, and you've got 80,000 kilograms. That's 176,000 pounds which divided by 2,000 --

MR. LAZARO: All right.

THE COMMENTOR: -- comes out more like --

MR. LAZARO: You're correct. I thought he said 80,000 pounds, so you're correct.

THE COMMENTOR: 80 tons. 80 tons. 80 tons is set aside in the 1992 document as an acceptable number.

4-10

So my comment is: Therefore, if you would just like to bring in 8200, which is a mere four tons, that makes it okay?

I had the opportunity to cut the article out of the paper, which is a very nice piece of propaganda, and I would just like to read a portion

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of it.

THE FACILITATOR: Could you cite it for the record, please?

THE COMMENTOR: Pardon?

THE FACILITATOR: Could you cite it? What date was it?

THE COMMENTOR: This no longer has the date. Oh, it's February 4th, and it was an article written by -- "Tri-Valley Herald" written by Nancy Mayor, staff writer. And it says, "Lab asks to raise uranium limits."

So I guess perhaps we're not really raising the limits at all; we're working within the limits of 80 tons that are already here perhaps.

4-10 cont.

MS. MARIK: That's an administrative limit for the 490 complex.

What we're proposing here is that we raise the administrative limit that is at Building 332 where the Plutonium Facility complex is.

THE COMMENTOR: Okay. If I read this,

> "If the proposal is approved, the limit would raise from 660 pounds of uranium of any type. That's 300 kilograms" --

MS. MARIK: Of highly-enriched --

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THE COMMENTOR: -- "of uranium of any type to 8200 pounds of uranium of varying kinds. Of the 8200 pounds, only 1100 pounds would be highly radioactive. The present limit compares roughly to the amount the size of a basketball. The proposed limit is about the size of a 19-inch television set."

Isn't that an interesting analogy? How many tangerines go into a grapefruit?

Again, if I do a little bit of math, I determine that if 660 pounds is one basketball, 8200 pounds is 12 basketballs. So the amount of material that you want to bring on site or have active on site here is 12 times greater.

4-10 cont.

And my neighbor asked me on the way over if I would bring a basketball home for his son; he likes to play basketball.

The propaganda sort of is there's not much to this; it's just the size of a TV set. It's actually a 12-fold increase in the amount of material that we have to deal with.

4-10 cont.

And I just happen to live across the other side of Vasco Road. You probably live in Chicago,

16

4-10 cont.

and he lives over in Berkeley, and so on, and there's rather little concern on your part about what happens here.

MS. MARIK: Well, one of the things that I'd like to explain to you is the administrative limits issue. And what an administrative limit means is that that is the maximum amount of material that you can have within that facility. That doesn't mean that that's the amount of material that's at risk at any one time.

And what we're saying is: To manage the materials better for the programmatic activities. Most of that will be in storage; the amount of material that we actually perform operations on at any one time or the material at risk is not changing within those facilities.

MR. TAYLOR: Maybe --

THE COMMENTOR: The actual amount or the limit?

MS. MARIK: The administrative limit is only a number that we say, "This is the maximum amount of material you can have in that building."

But we have very -- we have procedures that say, "This is the amount of material that we are actually performing operations on at any one time."

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That is not changing within those buildings.

We're saying that we need to have -- we need to be able to manage our materials better. Most of that material remains in storage at any one time.

The material at risk or the -- what you evaluate when you're doing the analyses documents or the safety analyses and say, "This is my accident scenario," that's not changing because it's the same amount of material that we're always going to be working on at any one time.

We have a fact sheet on -- on this. It's not the easiest concept to explain.

MR. TAYLOR: If I could maybe give you my concept?

THE COMMENTOR: Well, do it in terms of basketballs. Can you help me with it in terms of basketballs?

MR. TAYLOR: If we do the -- enriched uranium is, I think, what DUE is more concerned about because it's a higher hazard to the public. Depleted uranium is in airplane ballasts and a lot of places -- sailboats. So it's out in the public.

So that 3,000 kilograms that we're talking

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about there is depleted natural uranium that you would find in nature or, like I said, in ballasts and that.

So what we're actually saying is: We could have had 300 kilograms of enriched uranium in that facility; we would like to raise that from 300 to 500.

So that, in your basketball analogy, you know, that's -- 300 is 1 basketball, so we're going one plus one and three-quarter basketballs, or something like that -- say two basketballs of highly-enriched uranium. So hopefully -- rather than 12 basketballs of highly-enriched uranium which is much more hazardous.

THE COMMENTOR: May I ask a quick question? You're saying highly-enriched uranium. Can you define that for me, please?

MR. TAYLOR: It's in the 80- to 90-percent enrichment, where natural and depleted is less than one percent enrichment. So there's a tremendous spread there. It's weapons-grade and that type of materials, yeah. Weapons-grade, reactor-grade, at that level.

4-11

THE COMMENTOR: You made reference to some of this material being stored. Where is it being

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4-11 cont.

stored? Locally? Elsewhere?

MS. MARIK: It's being stored within the building, but it's not at risk at any one time because the operations aren't being performed on it. It's in storage.

It's not considered -- it's not considered feasible to have an accident scenario that covers all material that's in storage. You analyze accidents for the material that's being operated on and that you -- is a foreseeable accident scenario.

If anybody wants to expand?

MR. TAYLOR: I guess, it's -- it's stored in the vault, is the answer to the question, in sealed cans. And they put those in a -- like a regular -- like, you know, safety deposit-type vault. So that's where it's stored, and it's only brought out when they're going to use it.

THE COMMENTOR: But then it's still on premises.

MR. TAYLOR: Yes, it is.

MS. MARIK: Yes, it is.

THE COMMENTOR: Part of the way I understood your answer is, "Well, we're using some of it, but the rest is somewheres else in storage. But we

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still have all of this material here within the confines of the Lab."

MS. MARIK: Yes.

THE COMMENTOR: I was in Harrisburg, Pennsylvania, in March 1979. And all of their material that was stored at Three-Mile Island was in a safe way with regard to any foreseeable accident.

MS. MARIK: That was an operating reactor plant.

THE COMMENTOR: Yes, it was.

MS. MARIK: Right. It's --

THE COMMENTOR: And what you're suggesting is that you've foreseen everything that's possible in your program, and, therefore, there's no possibility that any accident could ever involve the material in the vault; it's only what you actually have in your hands at the moment that's -- that's possible to have an accident.

4-12

Because if we do have a big accident with that, what's the possibility that the stuff in the vault becomes involved also? Like Reactor 2 and Reactor 1 on Three-Mile Island. If Reactor 2 had gone, Reactor 1 would have gone also.

MS. MARIK: Do you want to explain the

analyses process?

MR. LAZARO: Well, I guess with respect to the accidents at the facilities that we're talking about at Lawrence Livermore Lab, it's not really appropriate to compare the types of activities that are going on in these buildings to what you would have going on in a commercial nuclear reactor.

All the material in the core of a commercial nuclear reactor would be at risk in the event of a failure or a meltdown, as what happened at Three-Mile Island.

The types of operations at these facilities and in the sealed sources -- most of the material is left in these sealed sources -- and the possibility of the material getting into the environment, for example, from an earthquake, it wouldn't happen.

If the material was outside the sealed source in the Laboratory in a glove box -- they do the experiments in glove boxes -- if there was an earthquake during a glove box, then you -- then there's a potential that that material -- that small amount of material that they're doing the experiment on could be released as a result of an earthquake.

And that's what was assessed in this document, the release of the material during the -- during the experiment which could -- could be released to the environment; whereas, the material that's stored in these sealed sources, the probability of a release to the environment would be extremely small. It would be incredible for that to happen.

So you have to look at it from a risk perspective. It's a very minute risk with respect to this large amount of material that's in storage versus the amount that's actually being worked with.

THE COMMENTOR: I hear, you know, a lot of sensible talk coming over here from the end of the table, but I also know -- and I'll follow it over the years -- different problems that are related with the situation.

And you sound like very responsible people, yet both this Main Site and Site 300 are on the Superfund cleanup, meaning that they're on the major contaminated areas in the entire country.

That tells me that somebody's not doing

4-13

their homework; somebody's not doing their cleanup. That tells me that accidents happen and that people

get sloppy and that you're not taking the proper precautions.

We are having plutonium ventings into the atmosphere. We're getting that stuff out here in the parks in the area. We're having tritium leaks.

4-13 cont.

You discovered PCBs out there in the area where you're going to put in the NIF facility -- that's redundant, but I'll let it pass at that.

What kind of assurances can you give us that your people are any better prepared today then they have been over the last 10, 15 years to cope with the problems of what you're dealing with?

MS. MARIK: Well, one of the important things to note is that the regulations have changed over the years. And over the years, it's been an ongoing process of getting smarter about releases into the environment and the impacts that those have at our sites.

And some of those issues are difficult to deal with because I consider them to be legacy issues. In the case of releases to groundwater and everything, we didn't have regulations that required things to be disposed of in containers, or we weren't aware of the issues that, you know, were happening within the environment.

And all I can really say as a result of all this is is that it's always the full intent of the Department of Energy to ensure that we perform operations safely both for the safety of our workers as well as the safety of the public and the environment.

And other than that, I --

THE COMMENTOR: Where do you live, may I ask?

MS. MARIK: I live in Fairfield.

THE COMMENTOR: Well --

MS. MARIK: I can't afford to live in Livermore.

4-14 THE COMMENTOR: So what you're saying is that some of these things have happened because they are unforeseen. And what assurance can you give us that there are not new problems with the work going on that have yet not been foreseen and that were not -- we still have to reclaim all those plumes of pollutants under the ground that have gone beyond the perimeter of the Laboratory, gone into private residential areas. We still have to pull all that back.

What can you tell us -- what can you do for us to really assure us? I mean, is there some sort

of outstanding liability policy that the Lab has to cover all of these kinds of things? I doubt it.

4-14 cont. You know, you're just talking. What do you have out there to guarantee the citizens like us if we lose, let's say, home equity value, that you're going to pick up on it and pay us a difference?

4-14 cont. What can you say when the vineyards around here that have four times the tritium rate -- and as soon as consumers really get -- find out about that, they're going to start buying -- they're going to start buying something else -- what are you going to do to offset the losses to those people?

What are you going to do to the little businesses that we have around here, to the restaurants and other things, that when people find

4-14 cont. out that we have so much pollution related to the nuclear industry that we're going to start going out of business and selling our homes at a loss and paying the price of our children coming up with these cancer clusters and other things, melanoma

4-14 cont. clusters?

What are you going to do about that? What kind of policy or funding do you have for that?

THE FACILITATOR: It seems like that's a very reasonable question. It probably involves some other people besides these folks to answer that. But I think the questions that you asked -- and you would address that in your public response document, would you not?

MS. MARIK: Yes.

THE FACILITATOR: I mean, I've tried this in many other places. This is a tough question to answer. There's no doubt about it. It's a good question to raise.

4-15 THE COMMENTOR: Well, I don't see facilities like this going up like in Beverly Hills. I don't see facilities like this going up in Manhattan. I don't see facilities like this going up in downtown San Francisco.

So it seems to me that selections are being made where people are maybe not as well organized and don't have as much money to resist this kind of operation.

THE FACILITATOR: Okay. Comment taken. Understood.

Mr. Falk?

THE COMMENTOR: Comment about your report or whatever this is, Draft Supplement Analysis.

I haven't had time to read it, but on page 6-1, I want to comment. Why don't you stick to a given unit dimensionality so you don't confuse the

4-16 non-mathematical person? In two of these sentences, you've changed the units.

MS. MARIK: What units?

THE COMMENTOR: And not everyone has the moxie to translate it.

MR. TAYLOR: Could you be more specific?

MS. MARIK: Yeah. Could you let me know what sentence?

THE COMMENTOR: This is on the little box thing that you have on page 6-1. You're talking about chances of one in a million -- one in a

4-16 cont. million years. And then you get down here, talking about in six-part linear.

Why do you change the units like that? This confuses the reader, unless they're already familiar with these things.

MS. MARIK: Well, all I can say is that your comment is noted, and with that comment we'll try to make it clearer to the reader what -- what we're -- what the conclusions are there.

THE COMMENTOR: You'll try to make it clearer --

THE FACILITATOR: Are you saying you'll try to be consistent?

THE COMMENTOR: -- is that what you said?

MS. MARIK: I'll try to make it clearer.

THE COMMENTOR: Well, it's confusing to some pretty well-educated readers. Reasonably well-read in science, too.

PREVIOUS COMMENTOR: If we're going to talk about powers of 10 in one paragraph, then they should continue in powers of 10 in the others. (4-16 cont.)

MR. LAZARO: Your comment is well-taken.

THE COMMENTOR: One in a million changes, that's as the gentleman represents. (4-16 cont.)

MS. MARIK: We will try to make that clearer.

MR. LAZARO: That's an easy fix.

THE COMMENTOR: And why not -- why not also put beside these curies the equivalent in becquerels and tell them exactly the meaning of that because I don't know how many people know what a curie is. (4-16 cont.)

It's a word related to some woman, but I don't know they know the value of that. That's a big, big number when you talk about 3.7 times 10 to the 10th. That's a whopping -- that's comparable

to the number of stars in our galaxy. You see?

They don't have a feel for that kind of thing. So talk about something that -- tell them about the number of disintegration per second. They'll catch onto that damn quick if you don't confuse the issue. And that's what you should use anyway, you see. (4-16 cont.)

Those are so-called what? International units? Do it.

MS. MARIK: Your comment is noted.

THE FACILITATOR: Good. Anyone else?

THE COMMENTOR: Well, I'd just like to say that, again, over the years -- I should mention, by the way, that I've lived in the community for 25 years. And sometimes that number, just like this gentleman was saying, you know, if you don't deal in the same relative conversion tables, sometimes that doesn't mean anything.

To me, 25 years means a quarter of a century. A quarter of a century. And I've lived here and I've watched over the years the reports coming in of all the various problems that we have had with non-compliance with safety regulations, non-compliance with a number of issues in here that have led to these accidental leaks of

plutonium, tritium, the PCBs and other things and, furthermore, very clearly -- although I didn't realize that you would deny it -- the overt attempt to cover up all of this until it gets out, until some newspaper digs up the story, until some insider, some whistleblower gives the information.

But I have -- for a quarter of a century, I have been watching, hearing, and reading the insidious way and the arrogance of the people who are here that feel that they can do whatever they want to do in quest of knowledge, in quest of science, but they don't give a damn about how they involve us, how they endanger us. They don't give a damn about the democratization of the process.

You're all on some sort of a high-flying loop about the quest of knowledge. But you're endangering all of us: my life, my children's life, my grandchildren's life.

And you don't live here, and you're not part of it. And that's part of what this community resentment is about.

And over the years, there have been countless examples of accidents, of leakages, of ventings. The places where our children go to play, the parks and all of that, you have the

higher plutonium levels. And you don't live here, and you don't pay that price, but we do.

And I want you to know that -- I mean, we're part of a community in here that are getting a little bit fed up with this, and we want to hold you and we intend to hold you to a higher standard.

And one of you mentioned reference to, well, if we're not happy with it, we can sue you. And there have been suits being brought lately. And there have been some very, very significant results coming out of that thing.

And I want you to know, I mean, speaking for myself but there's many other people in here, that we're a little bit tired of this process. And it's very easy -- I'm thinking right now -- has nothing to do with us. (4-17)

A year or so ago, the federal government decided to set up a waste incinerator plant over there in the Ward Valley area in an Indian reservation area. Right?

Nobody's going to stand up to fight to that. You go where the people don't have the ability to organize themselves, don't have to money the resist this. But the things are getting better publicized, and there's a better accounting going

on.

And even though you live in Chicago or New York or D.C., the time will come that we hold you accountable to these very sensible explanations that you're giving. And so when you go back home, you better make sure you've got the right liability insurance.

THE FACILITATOR: One thing that could be done is to explain in the comment response document just what provisions are out for letting people know if there's a problem with the site. This is something -- it probably is done within that analysis, but it could be included.

Thank you.

MR. ZAHN: I might also invite the readers and the commentors, too, to refer to our annual -- site-wide annual environmental report which does summarize each year many of the mission histories or event-type of events that do occur that you may be concerned about.

And they're published annually, and they do give trending information. And I think you'd find in many cases -- most of the cases that you're speaking of that we actually have a good track record.

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And I think that those site-wide annual reports are a valuable asset for the public readership, written to be well-understood, and they do reflect the true monitoring progress here at the Laboratory.

THE COMMENTOR: It seems to me that information comes out only when it's forced.

For example, after the 5.5 earthquake that

4-18

we had here in Livermore, there were several leaks that the Lab remained absolutely silent about until the information began to leak out from insiders. That does not give me any confidence in the reports that you're citing.

THE FACILITATOR: Okay. Yes, sir?

THE COMMENTOR: Talking about the environmental reports you put out, are you involved in it?

MR. ZAHN: Am I involved in it?

THE COMMENTOR: Yeah, the yearly report?

MR. ZAHN: Yes. I have a small portion that's in there that represents some of those --

THE COMMENTOR: Let's talk about that a minute.

Now let's take the tritium monitor that's sits out here by Zone 7 Plant. Assuming that it

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works and functions properly for the full year and it is monitored and whatnot correctly and does its job properly, if you take the numbers in that environmental report collected from a man who's been out there for the full year, he breathes -- only in the air now -- enough tritium in a year to have beta disintegration in every cell of his body. You do the arithmetic.

I'll tell you that the number of cells in your body is approximately 10 to the 13. You pick your own numbers and do it.

Now, that's not what I call "no health threat." And that's the vocabulary that's used in things that are stated around here. "Our yearly report shows there is no" -- the word "no" keeps showing up -- "no health threat." No means zero.

It's been known for 30 years there is no such thing as a safe dose of ionizing radiation. And, furthermore, only one cell needs to become an outlaw to form cancer.

And cancer is only the tip of the iceberg if there's any damage from this stuff. If you have immune depression, you've got so many different DNA damages of which cancer is only the one. And you like to keep talking about cancer because you know

35

damn good and well it's a multi-factorial thing that takes from three to seven injuries of the same coll to get the show on the road.

Now let's talk about immune. Why don't you talk about immunity? I object to you using the word "no health threat." That is a scientific deception on people that don't know that -- zero. "No" means zero to me. I assume it means zero to everyone else.

Say that that is "small" not "no" threat.

THE FACILITATOR: Okay.

THE COMMENTOR: Now, you do the arithmetic on tritium only in the last couple of years of the environmental report. Since you're part author, do it. See if I'm wrong. Call me up. My phone number is in the book.

THE FACILITATOR: Please. Sir?

THE COMMENTOR: Are there -- you bring up the safety issue again in the report. Are there no

4-19

experiments going on at this facility which are so secret that were there an accident you could not report it?

MS. MARIK: No. We would always report.

THE COMMENTOR: But you didn't after the earthquake.

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MS. MARIK: What exactly didn't we report? There was a Type B investigation done on the release from Plutonium Facility, and that report is public. I can get you a copy of that.

THE COMMENTOR: The report became public after other people reported it. You did not come forward with it. And you did not come forward with some of the other accidents that have happened here until other people find out about it.

4-20

That's the part that puts citizens like me at issue with an institution or an organization such as yours.

MR. TAYLOR: Maybe I can -- excuse me -- answer that.

What we have done that actually Marion's group and -- have requested that we have what we call occurrence reports that identify each and every accident that we have at this Laboratory and every other Laboratory.

And those occurrence reports are made public as soon as they're finalized. And everyone in the public has the ability to get a copy of those reports.

And we -- we discuss and explain every single accident that meets a certain threshold at

this Laboratory. Every single one is in the occurrence reporting process. And those are available to the public.

THE COMMENTOR: "A certain threshold." What does that infer?

MR. TAYLOR: If an individual cuts their finger or we have a truck accident, you know, those -- we don't report those types of things in occurrence reports. Those types of things do go in a report. They go in accident and injury reports.

THE COMMENTOR: Could I ask you to give some information then, as long as this is so open, about those employees that were injured a few years back when there was a criticality accident?

4-21

We've never been able to get the names of them or find out what happened to them when there was a situation with that explosion and four people? Can you give me now, for the record, the names of those four employees?

MR. TAYLOR: No. We would never do that. That's a violation of their personal rights.

THE COMMENTOR: Of course it is. Their personal rights?

MR. TAYLOR: Yes.

THE COMMENTOR: You have no concern over what happened to them or how it might affect us or concern us, right? It's their personal rights?

MR. TAYLOR: We explained the details of what happened and that it happened to a certain number of people and exactly what happened to those people, but the medical records are not --

THE COMMENTOR: I don't think we even know exactly what happened to those people. We do know about the accident. What did happen to those --

4-21 cont.

what was the outcome of those people? Without giving us names, what did happen to those four people that were involved, if that was -- if that was the number?

MR. TAYLOR: If you could -- if you could give me the accident you're referring to? You know, I don't know if I'm talking about the same one you're talking about.

THE COMMENTOR: You know perfectly well.

MR. TAYLOR: If you can tell us the accident you're referring to, we could get you the report. You know, you could read that report. It explains what happened.

THE COMMENTOR: I'll give you my name and card, and you can send it to me.

THE FACILITATOR: Okay. I'd like to turn the attention back a bit to the Supplement Analysis if we can. People are certainly welcome to stay afterwards and ask questions about things that are tangential to that.

THE COMMENTOR: I'd like to ask the gentleman on the end who's involved with the yearly environmental report, when did they start reporting organically-bound tritium in the environmental report?

MR. ZAHN: I don't know, sir. You asked if I had a part to play in the documentation preparation; I do. My areas are sensitive natural resources and some others.

THE COMMENTOR: I read them all up to about this year, and I haven't found them. It's reported in the air but not the organically-bound or the free waters.

And is Chris here?

NEW COMMENTOR: Here.

THE COMMENTOR: Did it start this year?

NEW COMMENTOR: No. We haven't reported it.

THE COMMENTOR: See? You're not even doing a good job in your environmental reporting.

And that's where the tritium gets hunkered

in and stays and cycles in the community. The rest of it was -- gets into the air; it gets blown away; it get blown into Tracy, you see. We're rid of it, and it goes over to Tracy.

When are you going to start reporting the organically-bound tritium and giving an estimate of what it is that's bound up totally in this Valley? Because you've exposed people in this Valley to nearly a million curies of tritium. 4-22

NEW COMMENTOR: Oh, come on, Marion. We've talked about tritium and tritium releases at length. And I've invited you to contact me, to come in and talk to me and talk tritium.

THE COMMENTOR: Well, I'm asking this man here.

NEW COMMENTOR: You don't want to talk to the person who knows.

THE COMMENTOR: I want to talk to a person about addressing some of these things so that --

THE FACILITATOR: Your question and your comment is on the record. I would just say: They have to address that in the comment.

I'm sure Mr. Zahn can't give you an answer right now whether they're going to do what you think you'd like to have them do. But he can find

out from other people what can be done and what is being done now.

And I think that's as far as we're going to go with it tonight. They have some limitations here. We're talking about a Supplement Analysis.

THE COMMENTOR: I know, but there's a chance someone who has something to do with the environmental report diddling it out properly for the people here. That's all.

THE FACILITATOR: Okay. That's fair enough.

THE COMMENTOR: Do the rest of it that way, see? Then you'll get the confidence of people. Once you do these things properly and explain it to them, then you'll get more confidence.

THE FACILITATOR: I think that's the major point, that you want to see the people have more confidence in what's going on.

Anyone else?

THE COMMENTOR: I -- just reviewing in my mind some of the information I heard earlier, I wanted to ask for a clarification.

Talking about the experiments that are going on and the amount of material that is here, it's going to be in storage; it's not going to be actively involved in research projects. 4-23

Are we going to have a great many more experiments going on? Is that the reason why we need to have more material in storage? 4-23 cont.

MS. MARIK: At any given time, we don't expect to have more experiments going on. But the programmatic activities at the site --

THE COMMENTOR: What does that mean? "Programmatic activities at this site"? Say that in English. Something about the programmatic activities. 4-23 cont.

MS. MARIK: The research and development projects. And, like I said, in this particular example, we've listed what the -- what the projects that -- the amount of material that we're proposing is on page 6-5 of the document, and those are the programs that will be supported.

So this is like a list of the different research and development programs.

THE COMMENTOR: You've said there will not be any more research going on, but there is a need for more material in storage. 4-23 cont.

MS. MARIK: No. You asked about an increased number of experiments. And what I'm saying is at any given time, there won't be any more material at risk. You can only have a certain

amount of material out at any given time.

But the different -- the different programs that will be going on at that time -- I mean, these are the programs' activities -- I'm wrapping myself here --

THE COMMENTOR: Let me see if I can paraphrase that then and say that there will be more programs going on that are using the material than there is presently. 4-23 cont.

MR. LAZARO: Let me give you a concrete example. If you look at chapter 6 or Section 6.2 of the document, it talks about -- about Building 332 and the programs that would be driving the need for more uranium to be stored in the vault in Building 332.

What Lois is trying to tell you is: Okay, you have these individual experiments; the amount of material that would be at risk at any one time would not change.

However, your question is: Well, why do you need more material in the vaults? What it does change is the frequency. You're going to have more experiments that are going to be conducted than we've had in the past. So the frequency is going to increase.

4-23 cont.

THE COMMENTOR: So you're working 24 hours a day instead of just one shift, as an example? The frequency goes up per day but not per hour?

MR. LAZARO: It's not like a routine operation at a manufacturing plant where you have shifts. I mean, you're going to do experiments based on a schedule that the manager of the facility sets out for the projects that he's working on.

So it's not going to be like we're going to have five experiments on April 25th and five experiments the next day and so forth. It's going to vary throughout the year.

But the total number for the entire year is going to go up a fractional amount because of some of these programs.

For example, the MOX program was mentioned as one of the drivers in here. So there's going to be some additional experiments that would be needed to conduct the MOX program, and you'll have more operations in the glove box associated with that program.

Does that answer your question?

THE COMMENTOR: I think it answers the question. It certainly raises another one. The

4-24

number of experiments is going up a "fractional amount." I think I heard you say that.

MR. LAZARO: It's going up more -- I can't give you an exact number.

4-24 cont.

THE COMMENTOR: What's the fraction of 12 divided by 1, which is the increase in the amount of material? That's hardly --

MR. LAZARO: It's not going to go up the same proportion as the increase in the amount of material. I could tell you that.

4-24 cont.

THE COMMENTOR: Then why increase the material to that level? If you're going to increase your experimental rate by 25 percent or 75 percent, why multiply the amount of material by 12?

THE FACILITATOR: I suggest that you take the comment and that you explain more clearly than you do probably in Section 6-5 just the number of experiments, how often the material is going to be actively used, how often it is not going to be used so that we can have a clearer understanding on differentiation for the gentleman.

MR. TAYLOR: You're asking, "Why do we need this much?" Is what you're asking?

THE COMMENTOR: Right.

PREVIOUS COMMENTOR: And perhaps related to that, I realize again that the Lab has an extensive history of safety violations and other things. But one thing that has come to my attention lately, for example, is where you do work with plutonium.

And you use certain filters, and they're called HEPA filters. And I have seen some declassified information that was obtained under the Freedom of Information Act. And while these

4-25

have a limited lifetime and they're subject to damage by moisture and excessive heat, excessive cold, that there are indications in here that some of those HEPA filters have not been changed in 30 years. And that has lead to some of these accidental plutonium ventings.

Now it's there; it's in the record. We have requested that from the government, and we've gotten it.

When things like this happen, how can you assure people like us that you are doing a sensible, responsible safety job? And I would feel a lot better if all four of you said, "Okay, we feel so good about it, we're going to come over here, and we're going to move in, and we're going to buy houses across the street."

4-25 cont.

But you're exposing us to this stuff. How do you account for that? Why can't these HEPA filters be exchanged or replaced? What's going on?

MS. MARIK: They can be replaced. But what I would like to state is the last accidental release of plutonium that we had at the Lawrence Livermore Lab occurred in 1980. So I think that we have a pretty good record.

And if anybody has any other information or they think that there's other issues, let me know. But that is the last release that we have had of plutonium, and it was 1980.

4-26

THE COMMENTOR: Was that what got vented or put into the sludge that citizens over here took home and put into their gardens? That Livermore Lab handed out and gave out to citizens to take home to nurture their soil, and it had plutonium in it?

MR. TAYLOR: That was in the '60s.

THE COMMENTOR: Yeah. That's pretty bad.

THE FACILITATOR: Mr. Falk?

4-25 cont.

THE COMMENTOR: I'll give you one. The HEPA filters have a translucency built into them. You can't avoid tenth-micron particles.

So tenth-micron particles are zipping out of

4-25 cont.

that work area and going through the filters. They're translucent to the tenth-micron particle. It's the physics of the filters.

Now, tenth-micron particles can go by those ionization chambers or through them because a tenth-micron particle will disintegrate only maybe once or three times a day.

The workers in that building, if they have those tenth-micron particles, they go up to these monitors and stick a foot on those and go, they haven't been really checked. So those workers are at risk because those monitors, they do not do that; they do this: Put the foot on there, and they're gone.

I don't have to do the arithmetic, but they can be covered with many tenth-micron particles and get by all of those monitors. I've watched them.

And your ionization chambers that monitor those things, they go through there -- those tenth-micron particles walk. You do an activity calculation yourself.

One to three times a day for a tenth-micron particle. That size is going to be -- it's only from outside, if I understand.

4-25 cont.

You do the arithmetic yourself. And that means that those filters -- and there are only two of them in series -- you go check. If there's any activity that will produce tenth-micron particles, they're wandering through those filters all the time, every day. Any day that causes tenth-micron particle populations.

When I say "tenth-micron," you understand it's a function of a little window right in there. Not exactly. It's a function of the speed of gas and things of this nature. But you do the arithmetic personally.

MR. LAZARO: The key point or statement that you made there is if -- if there are tenth-micron particles that small that are generated during these experiments. I don't know if anyone has done an aerosol-size distribution of the particles that are generated, but I don't -- I don't -- I would be surprised that you're going to have particles that would be generated that are that small, unless you have some data to show otherwise.

THE COMMENTOR: Yeah. Any time you have a burn, you produce a high population of tenth-micron particles. Any time you have metal fumes from a burning particle -- you know, hunk -- little, tiny

4-25 cont.

chips from machining -- any time that burns, it produces a high population of tenth-micron particles.

Burning both uranium metal now -- you understand what I'm saying. If you burn either plutonium or the uranium metal, the metal fumes from that, the metal oxides produce them.

Just like when you burn a ribbon of magnesium oxide? You see that big smoke? A lot of tenth-micron particles are produced there, too. But when you burn uranium and plutonium, there's a high population of tenth-micron particles.

THE FACILITATOR: Okay. Any other comments?

Well, if not, I want to thank you all for your time tonight and remind you about the comment form, which I've lost. Here's one. Here it is.

And I'll remind you that the end of the comment period is February 25th. And you can get your comments in either written form, or I suppose you can call them in or fax them in if you'd like. And then we'll be looking forward to the comment response document which will be done subsequent to that and then a final determination.

Thank you very much. Sorry about my -- my slithering -- whatever you want to call --

stuttering of my voice, but I appreciate it very much, especially those of you who were both in this afternoon and tonight.

I want to thank you, Leti, for your work, and the notetakers and certainly the folks from the Lab and from Argonne.

Thank you very much.

(Whereupon, the briefing proceedings concluded at 7:15 p.m.)

STATE OF CALIFORNIA)
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I, LETICIA A. RALLS, a Certified Shorthand Reporter in and for the State of California, do hereby certify:

That said proceedings were reported by me at said time and place, and were taken down in shorthand by me to the best of my ability, and were thereafter transcribed into typewriting, and that the foregoing transcript constitutes a full, true and correct report of the comment and question portion of the proceedings which took place.

I further certify that I am not of counsel nor attorney for either or any of the parties hereto, nor in any way interested in the outcome of the said briefing.

IN WITNESS WHEREOF, I have hereunder subscribed by hand this 15th day of February 1999.

LETICIA A. RALLS, RPR
CSR. NO. 10070

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